



# **9K SERIES**

SERVICE MANUAL



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# 1

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## GETTING STARTED

### INTRODUCTION

The *9K Series Service Manual* contains essential information to help you maintain your 9K Series Lock.

### CERTIFICATIONS AND STANDARDS

- The locks comply with ANSI A156.2, Series 4000 Grade 1 standards.
- The locks are listed by Underwriter's Laboratories for use on 3 Hr., A label single swinging doors (4' x 10'), or pairs of doors 8' wide and 10' high.
- The chassis conforms to ANSI A115.2.
- The 8KS3 strike fits the standard door frame cutout as specified in ANSI A115.2.
- The #14 and #15 lever handles conform to California Administrative Code Title 19 and Title 24.
- The #14, #15, and #16 lever handles conform to the Illinois Accessibility Standard.

## DOCUMENTATION PACKAGE

The following documentation is available to help you with the installation, start-up, and maintenance of your 9K Series Lock.

The installation and assembly instructions also can be ordered separately:

Document Title	Doc. No.
<i>Installation Instructions for 9K Series Locks</i>	T56075
<i>Single and Double Dummy Trim Assembly Instructions for 9K1DT/2DT</i>	T56076

The templates required for lock installations also can be ordered separately:

Document Title	Doc. No.
<i>K08 Template for Door and Frame Preparation for 63, 73, 83, 93K Locks</i>	T56052
<i>K09 Template for Door and Frame Preparation for 63, 73, 83, 93K Locks</i>	T56053
<i>K10 Template for Door and Frame Preparation for 64, 84, 94K Locks</i>	T56054
<i>K11 Template for Door and Frame Preparation for 64, 84, 94K</i>	T56055
<i>K12 Template for Door Frame Preparation for 65, 85, 95K</i>	T56056
<i>K13 Template for Door Frame Preparation for 65, 85, 95K</i>	T56057
<i>K18 Template for 8K/9K Dummy Trim</i>	T56059
<i>K21 Template for Strike Specification for Cylindrical Locks</i>	T56060

## TECHNICAL SUPPORT

### Support services

When you have a question about the 9K Series Lock, your first resource for help is the *9K Series Service Manual*. If you cannot find a satisfactory answer, contact your local BEST Representative.

### Telephone technical support

A factory-trained Certified Product Specialist (CPS) is available in your area whenever you need help. Before you call, however, please make sure you are where the 9K Series Lock is, and that you are prepared to give the following information:

- what happened and what you were doing when the question arose
- what you have done so far to answer the question.

Best Access Systems Representatives provide telephone technical support for all 9K Series products. You may locate the representative nearest you by calling (317) 849-2250 Monday through Friday, between 7:00 a.m. and 4:00 p.m. eastern standard time; or visit the web page, [www.BestAccess.com](http://www.BestAccess.com).

**Training seminars** BEST holds training sessions for its customers. The seminars are specifically designed for BEST end-users who have a registered BEST masterkeyed system and registered BEST security equipment. If you are interested, you may contact your local BEST representative for details.



# 2

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## FUNCTIONS AND PARTS LISTS

The following pages contain function descriptions for all 9K Series Locks. This chapter also includes exploded diagrams that show all field serviceable mechanical parts, diagrams of trim and other miscellaneous parts, and function conversion information.

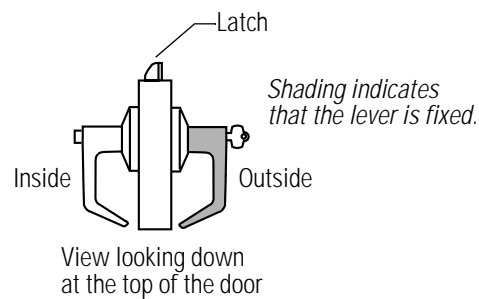
For information about the DEU and DEL functions, see the *W Series Service Manual*.

## FUNCTION DESCRIPTIONS

This section includes function descriptions grouped by the following function types:

- single-keyed (page 2-2)
- double-keyed (page 2-4)
- non-keyed (page 2-6)
- special (page 2-7)
- ANSI designation (page 2-9).

**Note:** If the function is ANSI defined, the ANSI designation appears by the function name.

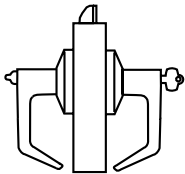


**Figure 2.1** Understanding function drawings

### Single-keyed functions

The following lists describe how the latchbolt, outside lever, and inside lever operate for each single-keyed 9K function.

#### AB—Entrance (ANSI F109)



Latchbolt operated by:

- inside lever
- outside key
- outside lever when the inside button is in the unlocked position

Outside lever locked by:

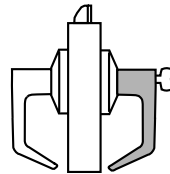
- inside button when pushed in
- inside button when pushed in and rotated clockwise

Outside lever unlocked by:

- inside lever when the inside button is pushed in but not rotated
- outside key when the inside button is pushed in but not rotated
- closing the door when the inside button is pushed in but not rotated

Inside lever is always unlocked

#### D—Storeroom (ANSI F86)



Latchbolt operated by:

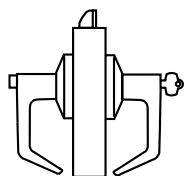
- inside lever
- outside key

Outside lever is always fixed

Inside lever is always unlocked



### E–Service station (ANSI F92)



Latchbolt operated by:

- inside lever
- outside key
- outside lever when the inside button is in the unlocked position

Outside lever locked by:

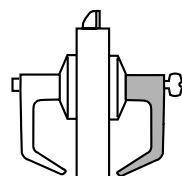
- inside slotted button
- inside slotted button when pushed in and rotated clockwise

Outside lever unlocked by:

- inside lever
- inside slotted button when rotated counterclockwise
- outside key
- closing the door when the inside button is pushed in but not rotated

Inside lever is always unlocked

### H and HJ–Hotel guest room (ANSI F93 for H only)



Latchbolt operated by:

- inside lever
- outside key when the inside button is in the unlocked position
- special emergency key after the core is removed with the control key

Outside lever is always fixed

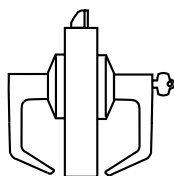
Key block feature released by:

- inside lever
- closing the door

Inside lever is always unlocked

Note: For the H function, pushing the inside button projects an “Occupied” indicator in the outside lever and blocks all operating keys. For the HJ function, pushing the inside button blocks all operating keys.

### R–Classroom (ANSI F84)



Latchbolt operated by:

- inside lever
- outside key
- outside lever when not locked

Outside lever locked by:

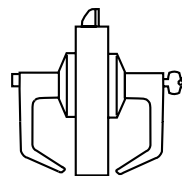
- outside key

Outside lever unlocked by:

- outside key

Inside lever is always unlocked

### T–Dormitory (ANSI F90)



Latchbolt operated by:

- inside lever
- outside lever when not locked

Outside lever locked by:

- inside button
- outside key

Outside lever unlocked by:

- inside lever when the inside button is pushed in
- outside key
- closing the door when the inside button is pushed in

Inside lever is always unlocked

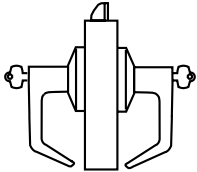
### Double-keyed functions

The following lists describe how the latchbolt, outside lever, and inside lever operate for each double-keyed 9K function.

Warning:

**Locks that secure both sides of the door are controlled by building codes and the Life Safety Code®. In an emergency exit situation, failure to quickly unlock the door could be hazardous, or even fatal.**

#### C–Corridor (ANSI F88)



Latchbolt operated by:

- inside lever
- outside key
- outside lever when not locked

Outside lever locked by:

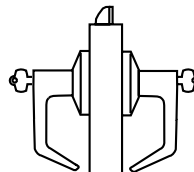
- inside key

Outside lever unlocked by:

- inside key

Inside lever is always unlocked

#### G–Storeroom (ANSI F91)



Latchbolt operated by:

- inside lever when not locked
- outside lever when not locked

Outside lever locked by:

- inside key
- outside key

Outside lever unlocked by:

- inside key
- outside key

Inside lever locked by:

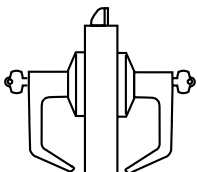
- inside key
- outside key

Inside lever unlocked by:

- inside key
- outside key

Note: Turning the key in either the inside or outside lever locks or unlocks both sides.

#### IN–Intruder



Latchbolt operated by:

- inside lever
- outside lever when not locked

Outside lever locked by:

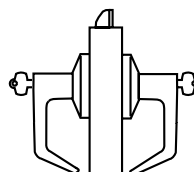
- inside key
- outside key

Outside lever unlocked by:

- inside key
- outside key

Inside lever is always unlocked

#### S–Communicating (ANSI F80)



Latchbolt operated by:

- inside key
- inside lever when not locked
- outside key
- outside lever when not locked

Outside lever locked by:

- outside key

Outside lever unlocked by:

- outside key

Inside lever locked by:

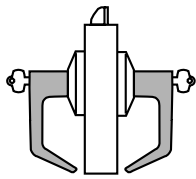
- inside key

Inside lever unlocked by:

- inside key

Note: Turning the key in either lever locks or unlocks that lever independently.

**W-Institutional (ANSI F87)**



Latchbolt operated by:

- inside key
- outside key

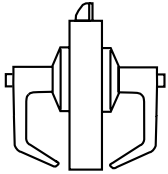
Outside lever is always fixed

Inside lever is always fixed

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**Non-keyed functions**    The following lists describe how the latchbolt, outside lever, and inside lever operate for each non-keyed 9K function.

### L-Privacy (ANSI F76)



Latchbolt operated by:

- inside lever
- outside lever when the inside button is in the unlocked position

Outside lever locked by:

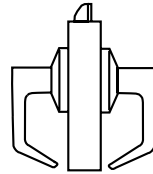
- inside button

Outside lever unlocked by:

- inside lever
- outside slotted button when pushed in and rotated counterclockwise
- closing the door

Inside lever is always unlocked

### N-Passage (ANSI F75)



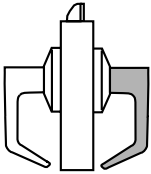
Latchbolt operated by:

- inside lever
- outside lever

Outside lever is always unlocked

Inside lever is always unlocked

### NX-Exit (ANSI F89)



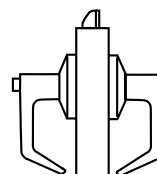
Latchbolt operated by:

- inside lever

Outside lever is always fixed

Inside lever is always unlocked

### P-Patio (ANSI F77)



Latchbolt operated by:

- inside lever
- outside lever when the inside button is in the unlocked position

Outside lever locked by:

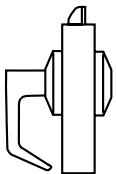
- inside button

Outside lever unlocked by:

- inside lever
- closing the door

Inside lever is always unlocked

### Y-Exit

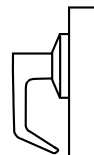


Latchbolt operated by:

- inside lever

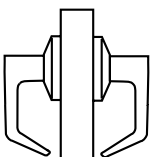
Inside lever is always unlocked

### 1DT-Single dummy trim



This lock is a single, surface mounted lever for an inactive door or a non-latching door.

### 2DT-Double dummy trim



This lock is a through-bolt mounted pair of matching levers for an inactive door or a non-latching door.

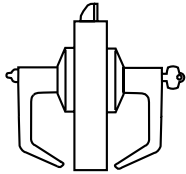
## Special functions

The following lists describe how the latchbolt, outside lever, and inside lever operate for each special 9K function.

Warning:

**Locks that secure both sides of the door are controlled by building codes and the Life Safety Code®. In an emergency exit situation, failure to quickly unlock the door could be hazardous, or even fatal.**

### A–Dormitory or storeroom lock (ANSI F81)



Latchbolt operated by:

- inside lever
- outside key
- outside lever when the inside button is in the unlocked position

Outside lever locked by:

- inside button

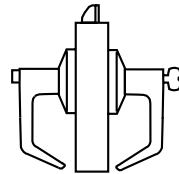
Outside lever unlocked by:

- inside button

Inside lever is always unlocked

Note: Inside button must be rotated counterclockwise to unlock the outside lever.

### B–Office (ANSI F82)



Latchbolt operated by:

- inside lever
- outside key
- outside lever when the inside button is in the unlocked position

Outside lever locked by:

- inside button

Outside lever unlocked by:

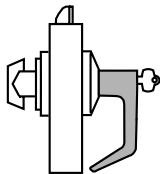
- inside lever

- outside key

Inside lever is always unlocked

Note: Inside button is released by turning the key in the outside lever or rotating the inside lever. Closing the door does not release the inside button.

### DZ–Closet or storeroom



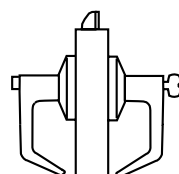
Latchbolt operated by:

- inside turn knob
- outside key

Outside lever is always fixed

Inside turn knob is always unlocked

### EA–Entrance or Office



Latchbolt operated by:

- inside lever
- outside key
- outside lever when the inside button is in the unlocked position

Outside lever locked by:

- inside button

- inside button when pushed in and rotated clockwise

Outside lever unlocked by:

- inside lever

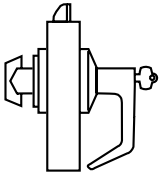
- inside button when rotated counterclockwise

- outside key

Inside lever is always unlocked

Note: Turning the slotted button keeps the outside lever locked until the button is turned back.

### RZ-Closet or storeroom



Latchbolt operated by:

- inside turn knob
- outside key
- outside lever when not locked

Outside lever locked by:

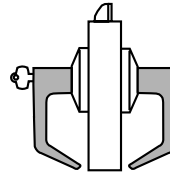
- outside key

Outside lever unlocked by:

- outside key

Inside turn knob is always unlocked

### XD-Special



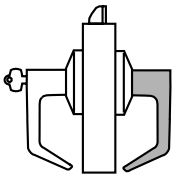
Latchbolt operated by:

- inside key

Outside lever is always fixed

Inside lever is always fixed

### XR-Special



Latchbolt operated by:

- inside key
- inside lever when not locked

Outside lever is always fixed

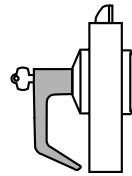
Inside lever locked by:

- inside key

Inside lever unlocked by:

- inside key

### YD-Exit

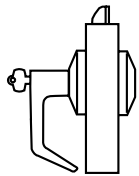


Latchbolt operated by:

- inside key

Inside lever is always fixed

### YR-Special



Latchbolt operated by:

- inside key
- inside lever when not locked

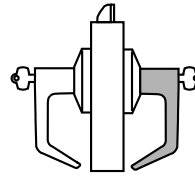
Inside lever locked by:

- inside key

Inside lever unlocked by:

- inside key

### DR-Special



Latchbolt operated by:

- inside key
- inside lever when not locked
- outside key

Outside lever is always fixed

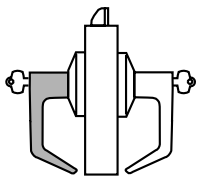
Inside lever locked by:

- inside key

Inside lever unlocked by:

- inside key

### RD-Special



Latchbolt operated by:

- inside key
- outside key
- outside lever when not locked

Outside lever locked by:

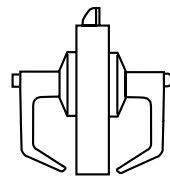
- outside key

Outside lever unlocked by:

- outside key

Inside lever is always fixed

### LL-Hospital privacy



Latchbolt operated by:

- inside lever
- outside lever when not locked

Outside lever locked by:

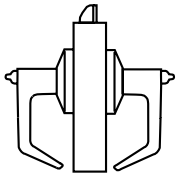
- inside button when pushed in

Outside lever unlocked by:

- inside lever
- outside button when pushed in and rotated counterclockwise
- closing the door

Inside lever is always unlocked

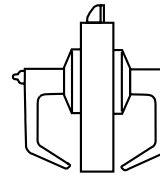
### M-Communicating (ANSI F78)



- Latchbolt operated by:
- inside lever when not locked
  - outside lever when not locked
- Outside lever locked by:
- inside button
- Outside lever unlocked by:
- inside button
- Inside lever locked by:
- outside button
- Inside lever unlocked by:
- outside button

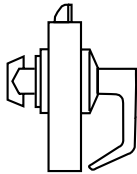
Note: Do not use this function for rooms that have no other entrance.

### Q-Exit (ANSI F83)



- Latchbolt operated by:
- inside lever
  - outside lever when not locked
- Outside lever locked by:
- inside button
- Outside lever unlocked by:
- inside button
- Inside lever is always unlocked

### Z-Closet latch



- Latchbolt operated by:
- inside turn knob
  - outside lever
- Outside lever is always unlocked
- Inside turn knob is always unlocked

Functions by ANSI designation	ANSI no.	Function
	F75	N
	F76	L
	F77	P
	F78	M
	F80	S
	F81	A
	F82	B
	F83	Q
	F84	R
	F86	D
	F87	W
	F88	C
	F89	NX
	F90	T
	F91	G
	F92	E
	F93	H
	F109	AB

## STANDARD FUNCTIONS

### AB FUNCTION CHASSIS—ENTRANCE LOCK (ANSI F109)

Item	Part No.	Qty.	Description
1	B55692	1	Turn button assembly
2	A55685	1	Inside hub and locking pin assembly
3	B55610	1	Non-keyed sleeve and driver assembly
4	A55518	2	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	B54886	1	Retractor assembly with long catchplate
8	A55673	1	Key release cam assembly
9	C55515	1	Spring drive plate
10	A55687	1	Keyed sleeve assembly <i>or</i>
not shown	A55725	1	Keyed sleeve assembly, non-IC
11	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
12	A55505	2	Chassis screw

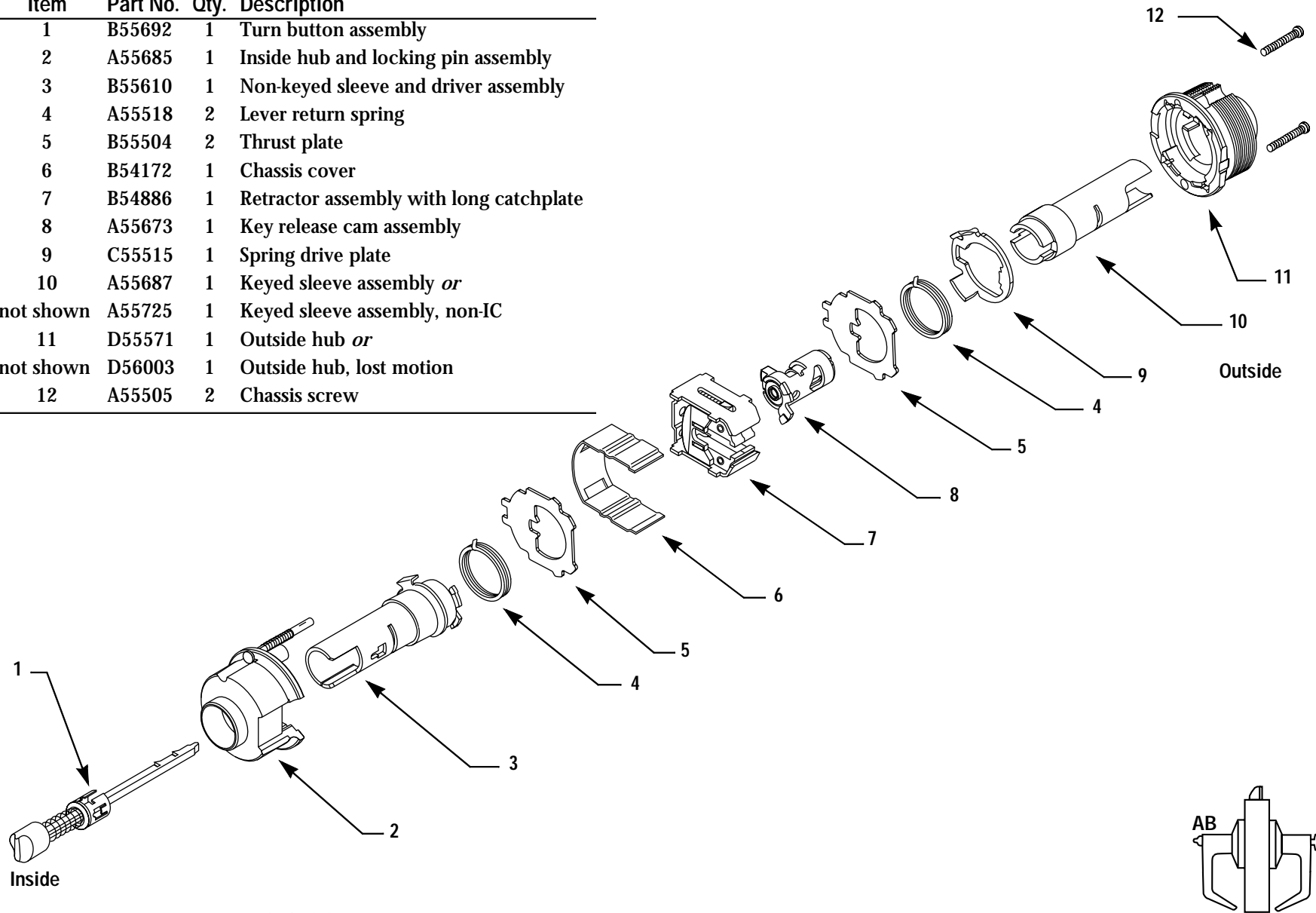


Figure 2.2 AB function exploded diagram



## C FUNCTION CHASSIS—CORRIDOR LOCK (ANSI F88)

Item	Part No.	Qty.	Description
1	A55685	1	Inside hub and locking pin assembly <i>or</i>
not shown	A56008	1	Inside hub assembly, lost motion
2	B55700	1	Sleeve & key release cam assembly <i>or</i>
not shown	B56024	1	Sleeve & key release cam assembly, non-IC
3	C55515	2	Spring drive plate
4	A55518	2	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	A54190	1	Locking bar
8	B54888	1	Retractor assembly without catchplate
9	A55673	1	Key release cam assembly
10	A55687	1	Keyed sleeve assembly <i>or</i>
not shown	A55725	1	Keyed sleeve assembly, non-IC
11	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
12	A55505	2	Chassis screw

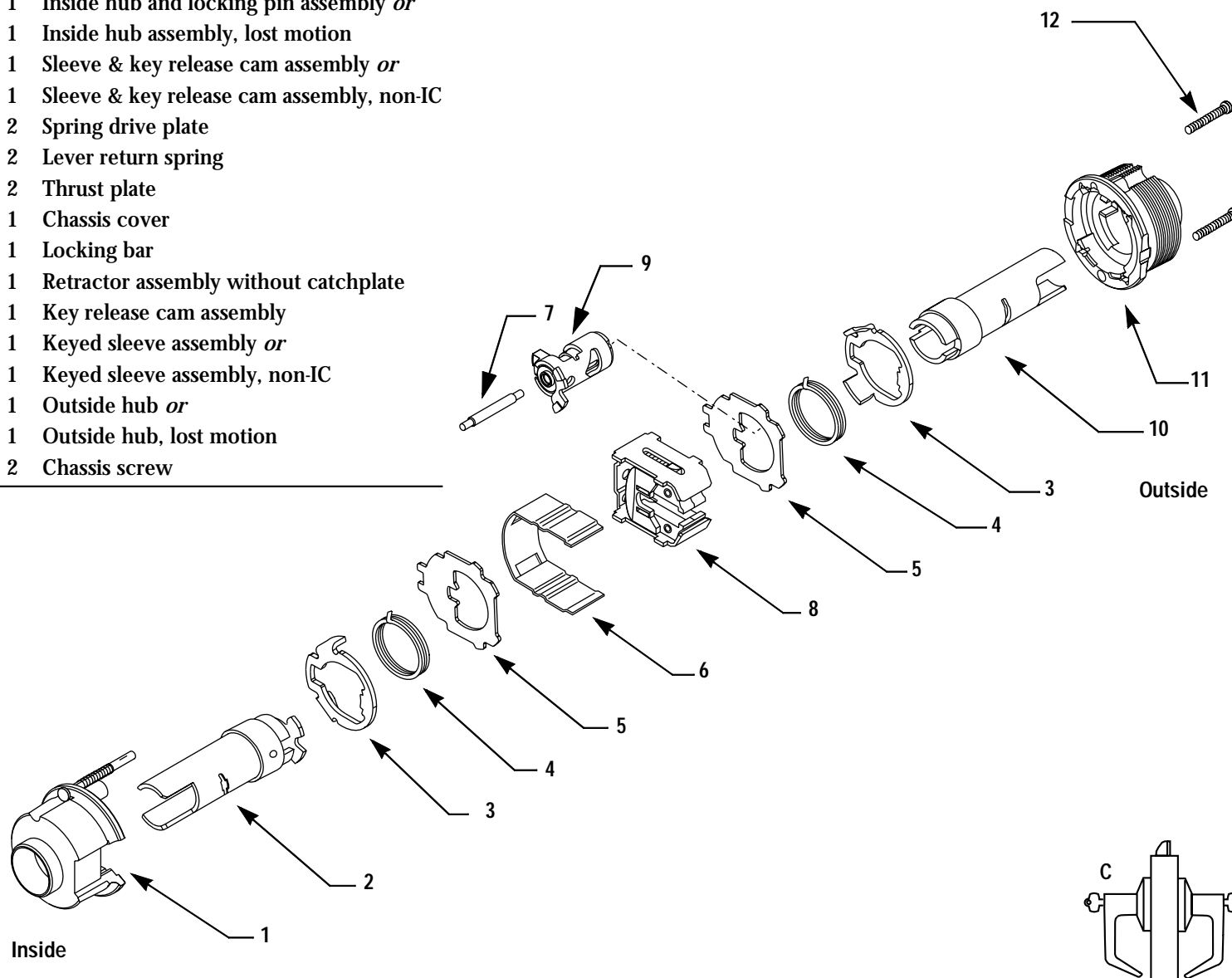


Figure 2.3 C function exploded diagram

# D FUNCTION CHASSIS—STOREROOM LOCK (ANSI F86)

Item	Part No.	Qty.	Description
1	A55685	1	Inside hub and locking pin assembly
2	B55610	1	Non-keyed sleeve and driver assembly
3	A55518	1	Lever return spring
4	B55504	2	Thrust plate
5	B54172	1	Chassis cover
6	B54888	1	Retractor assembly without catchplate
7	A55675	1	Key release cam assembly
8	C55515	1	Spring drive plate
9	A55687	1	Keyed sleeve assembly <i>or</i>
not shown	A55725	1	Keyed sleeve assembly, non-IC
10	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
11	A55505	2	Chassis screw

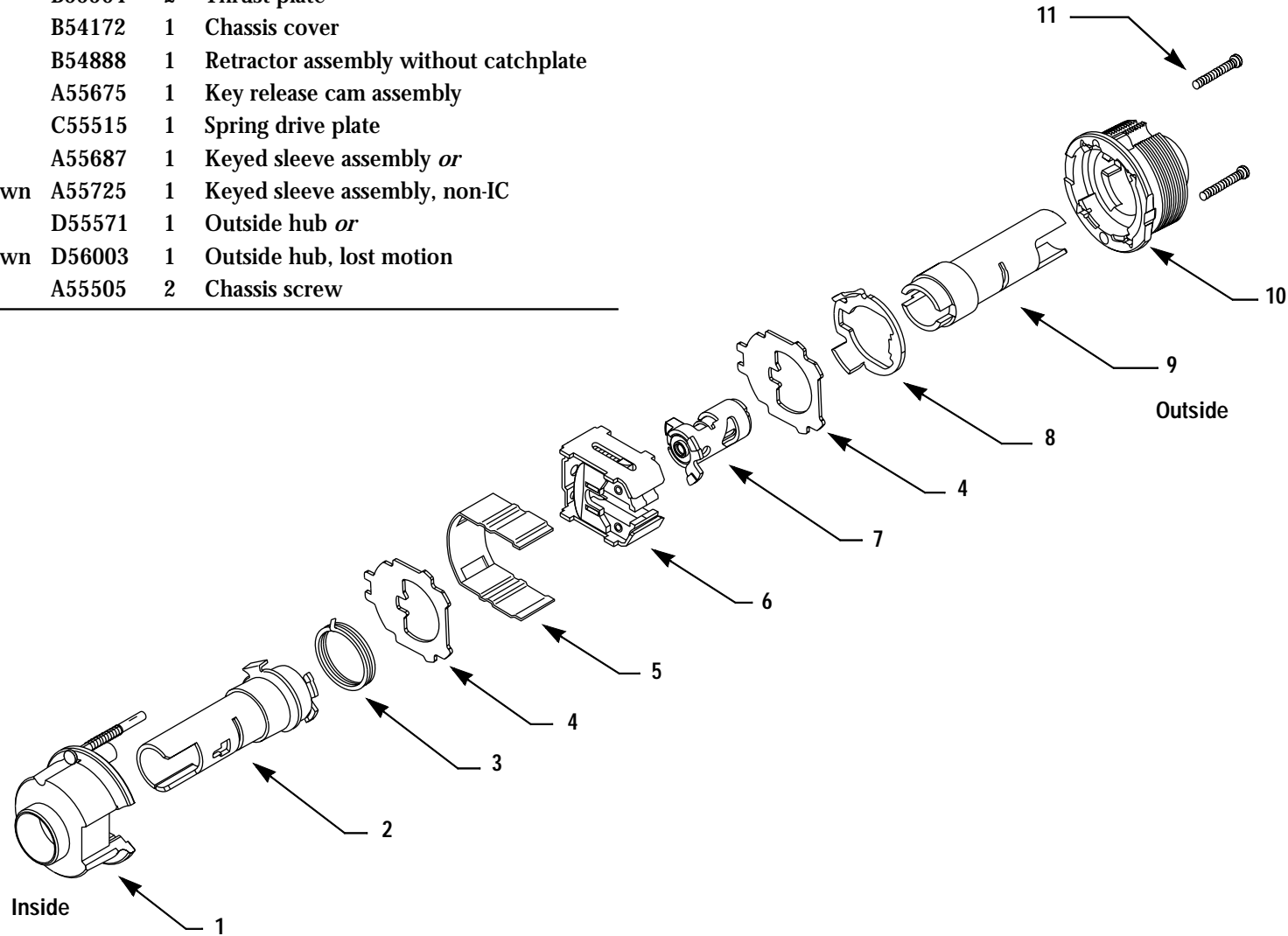


Figure 2.4 D function exploded diagram

# E FUNCTION CHASSIS—SERVICE STATION LOCK (ANSI F92)

Item	Part No.	Qty.	Description
1	B55694	1	Slotted button assembly
2	A55685	1	Inside hub and locking pin assembly
3	B55610	1	Non-keyed sleeve and driver assembly
4	A55518	2	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	B54886	1	Retractor assembly with long catchplate
8	A55673	1	Key release cam assembly
9	C55515	1	Spring drive plate
10	A55687	1	Keyed sleeve assembly <i>or</i>
not shown	A55725	1	Keyed sleeve assembly, non-IC
11	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
12	A55505	2	Chassis screw

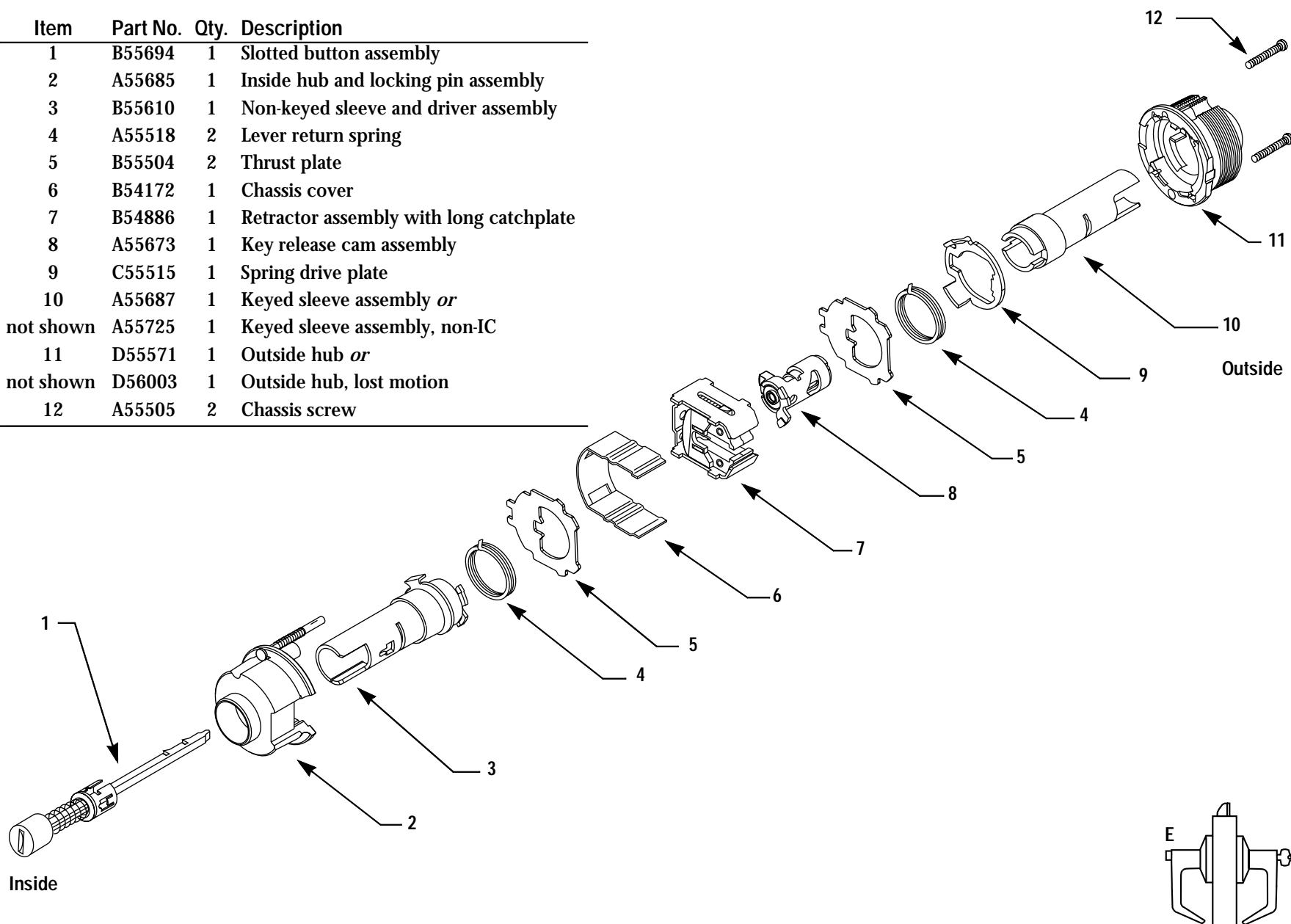


Figure 2.5 E function exploded diagram

## G FUNCTION CHASSIS—STOREROOM LOCK (ANSI F91)

Item	Part No.	Qty.	Description
1	A55685	1	Inside hub and locking pin assembly <i>or</i>
not shown	A56008	1	Inside hub assembly, lost motion
2	A55687	2	Keyed sleeve assembly <i>or</i>
not shown	A55725	2	Keyed sleeve assembly, non-IC
3	C55515	2	Spring drive plate
4	A55518	2	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	A55676	2	Key release cam assembly
8	B54888	1	Retractor assembly without catchplate
9	A54195	1	Locking bar
10	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
11	A55505	2	Chassis screw

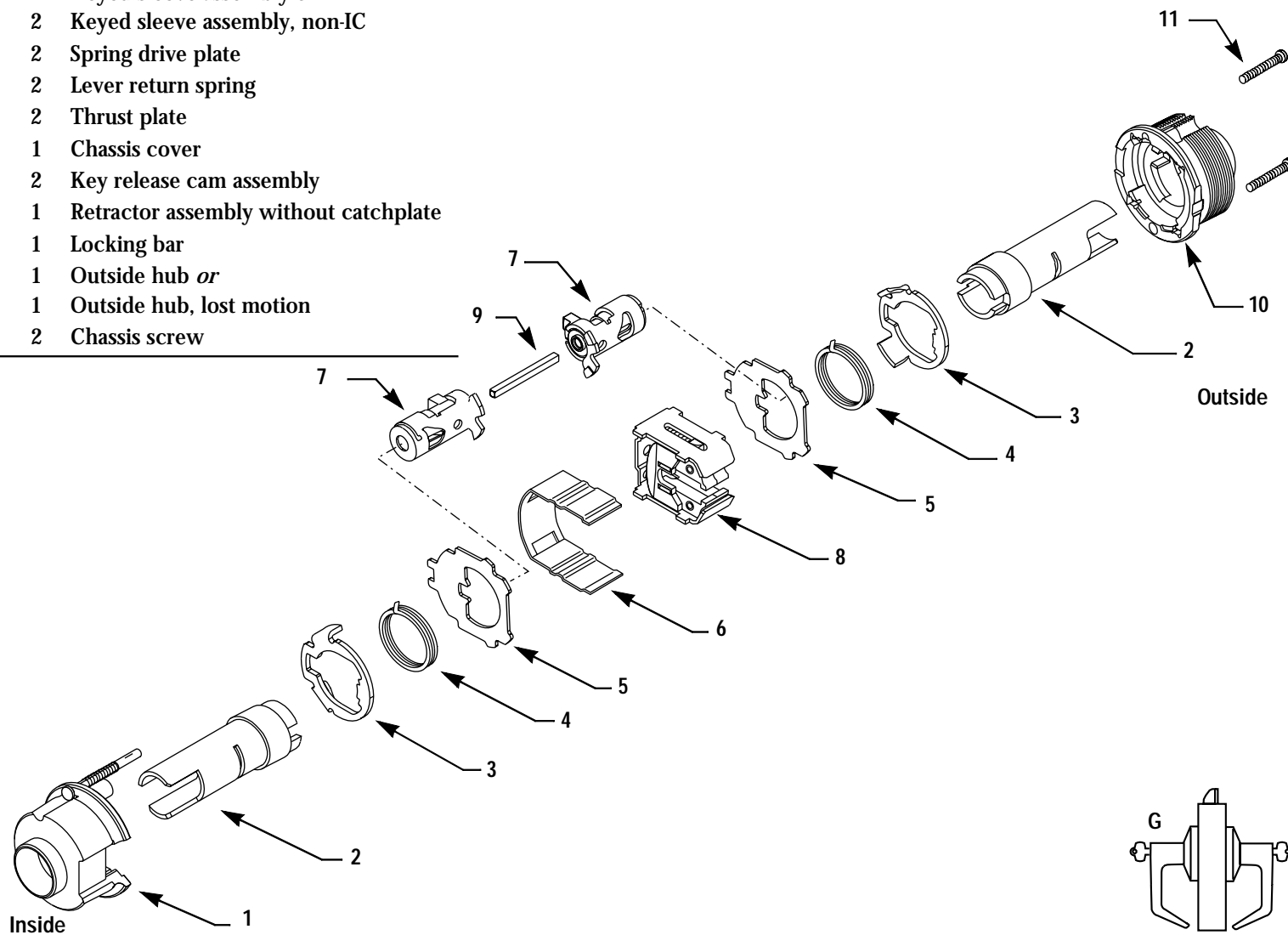
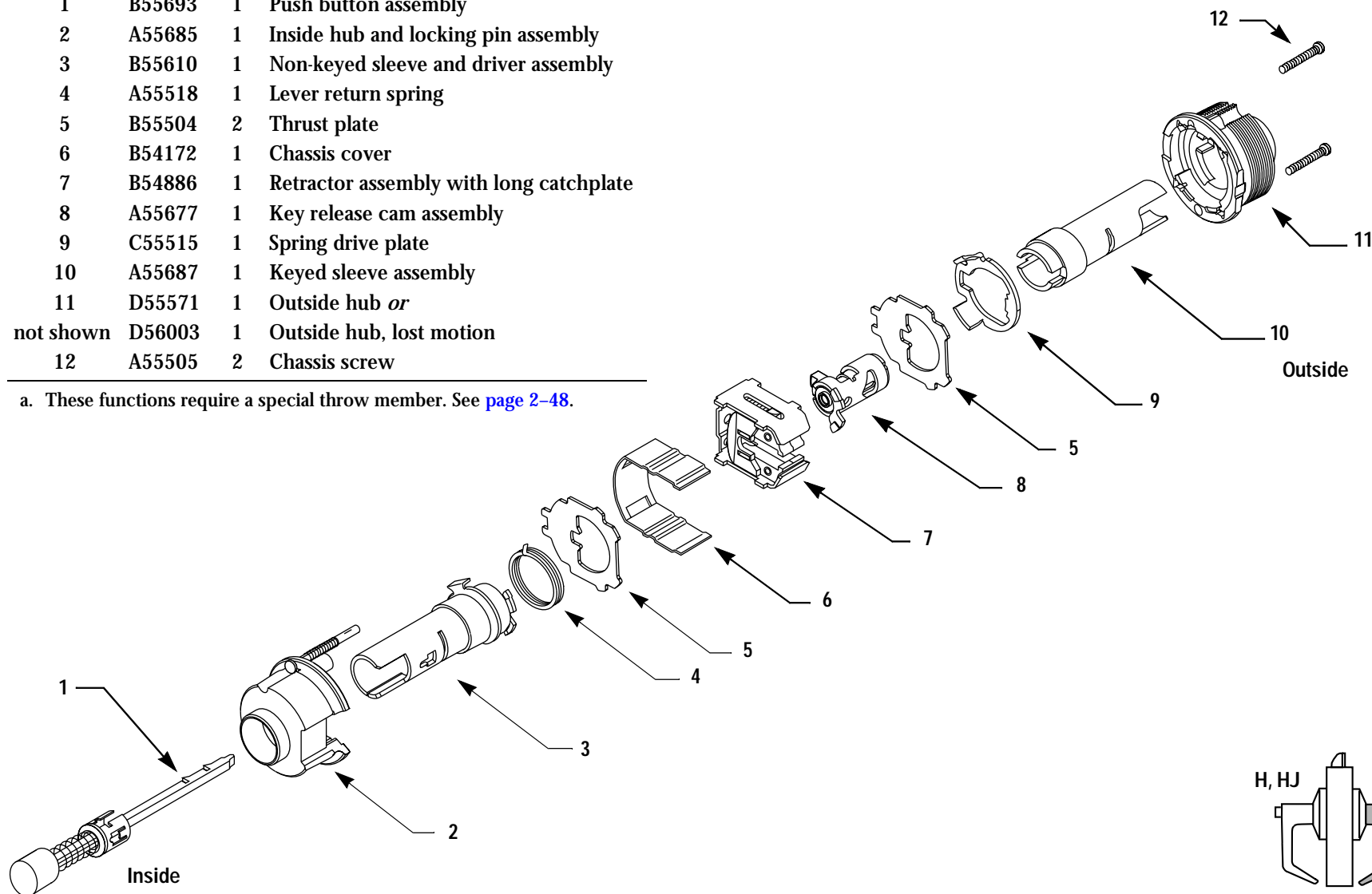


Figure 2.6 G function exploded diagram

**H FUNCTION CHASSIS—HOTEL GUEST ROOM LOCK WITH INDICATOR (ANSI F93)****HJ FUNCTION CHASSIS—HOTEL GUEST ROOM LOCK WITHOUT INDICATOR**

Item <sup>a</sup>	Part No.	Qty.	Description
1	B55693	1	Push button assembly
2	A55685	1	Inside hub and locking pin assembly
3	B55610	1	Non-keyed sleeve and driver assembly
4	A55518	1	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	B54886	1	Retractor assembly with long catchplate
8	A55677	1	Key release cam assembly
9	C55515	1	Spring drive plate
10	A55687	1	Keyed sleeve assembly
11	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
12	A55505	2	Chassis screw

a. These functions require a special throw member. See [page 2-48](#).



**Figure 2.7** H/HJ function exploded diagram

## L FUNCTION CHASSIS—PRIVACY LOCK (ANSI F76)

Item	Part No.	Qty.	Description
1	B55693	1	Push button assembly
2	A55685	1	Inside hub and locking pin assembly
3	B55610	1	Non-keyed sleeve and driver assembly
4	A55518	2	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	B54886	1	Retractor assembly with long catchplate
8	A55673	1	Key release cam assembly
9	C55515	1	Spring drive plate
10	A55701	1	Keyed sleeve assembly
11	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
12	B54745	1	Button release assembly
13	A55505	2	Chassis screw

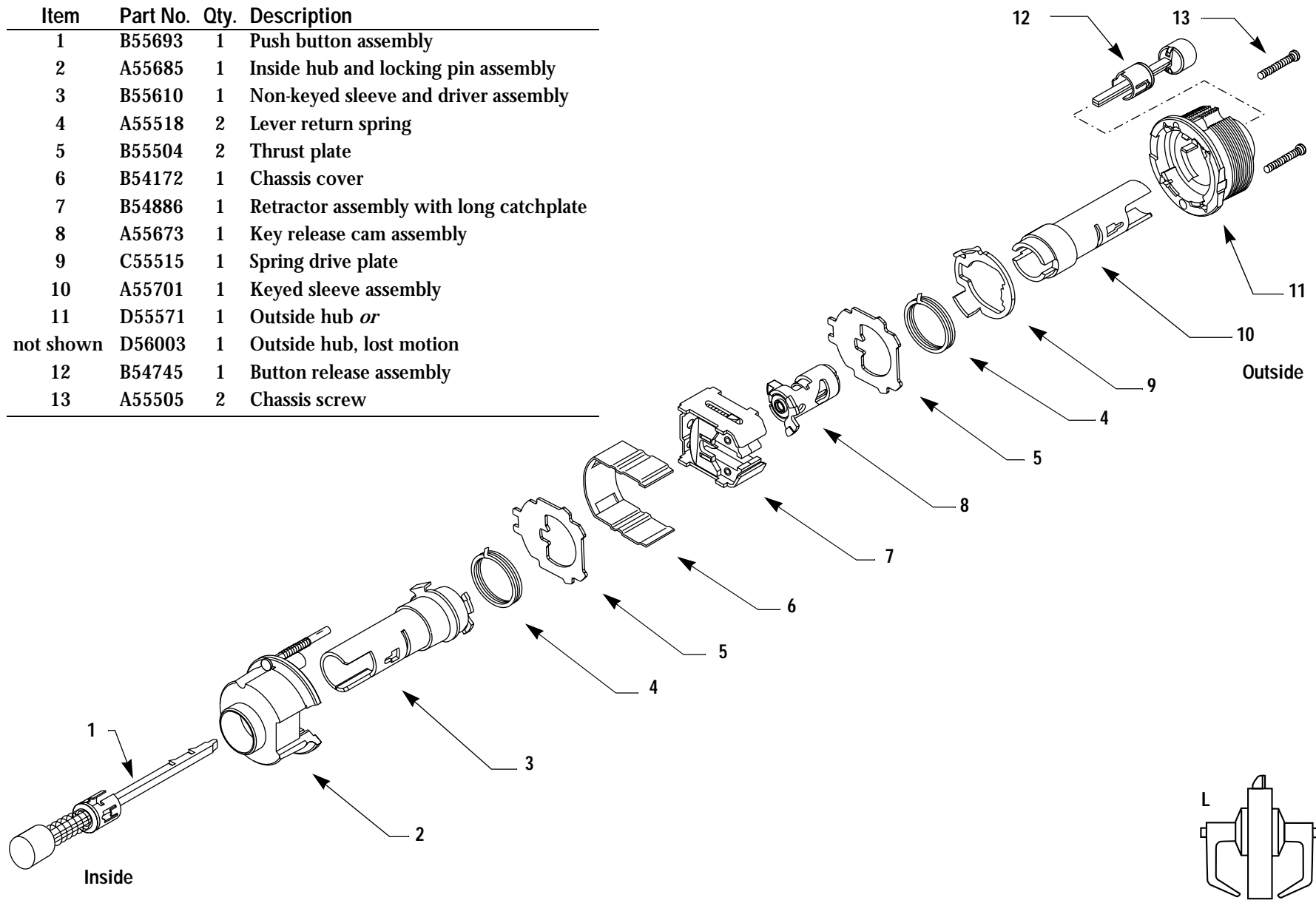


Figure 2.8 L function exploded diagram

## N FUNCTION CHASSIS—PASSAGE LOCK (ANSI F75)

Item	Part No.	Qty.	Description
1	A55685	1	Inside hub and locking pin assembly
2	B55610	2	Non-keyed sleeve and driver assembly
3	A55518	2	Lever return spring
4	B55504	2	Thrust plate
5	B54172	1	Chassis cover
6	B54888	1	Retractor assembly without catchplate
7	D55571	1	Outside hub
8	A55505	2	Chassis screw

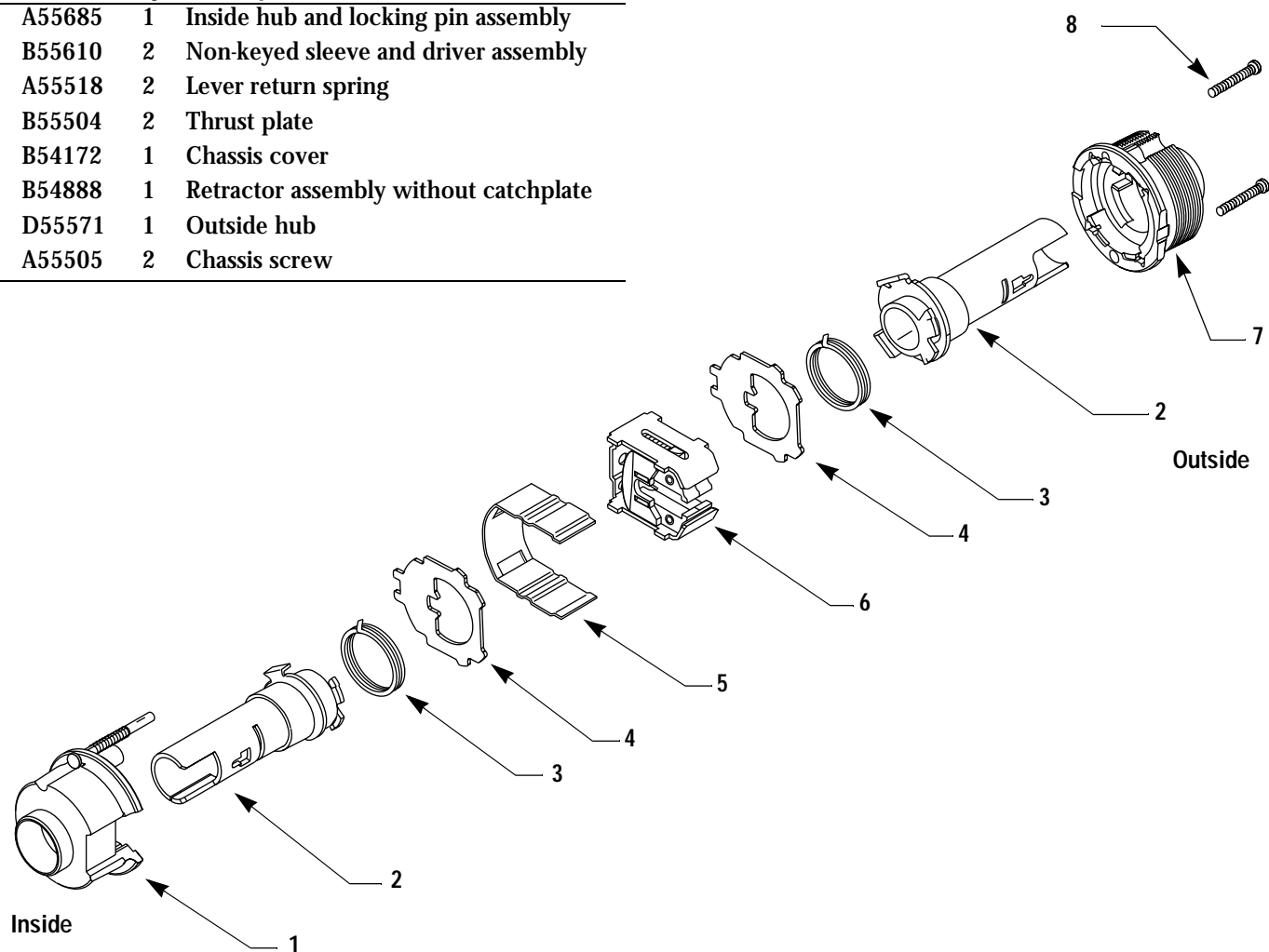
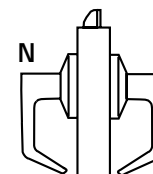


Figure 2.9 N function exploded diagram



## NX FUNCTION CHASSIS—EXIT LOCK (ANSI F89)

Item	Part No.	Qty.	Description
1	B55690	1	Locking bar assembly for “NX” function
2	A55685	1	Inside hub and locking pin assembly
3	B55610	1	Non-keyed sleeve and driver assembly
4	A55518	1	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	B54888	1	Retractor assembly without catchplate
8	A55680	1	Key release cam assembly
9	C55515	1	Spring drive plate
10	A55687	1	Keyed sleeve assembly
11	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
12	A55505	2	Chassis screw

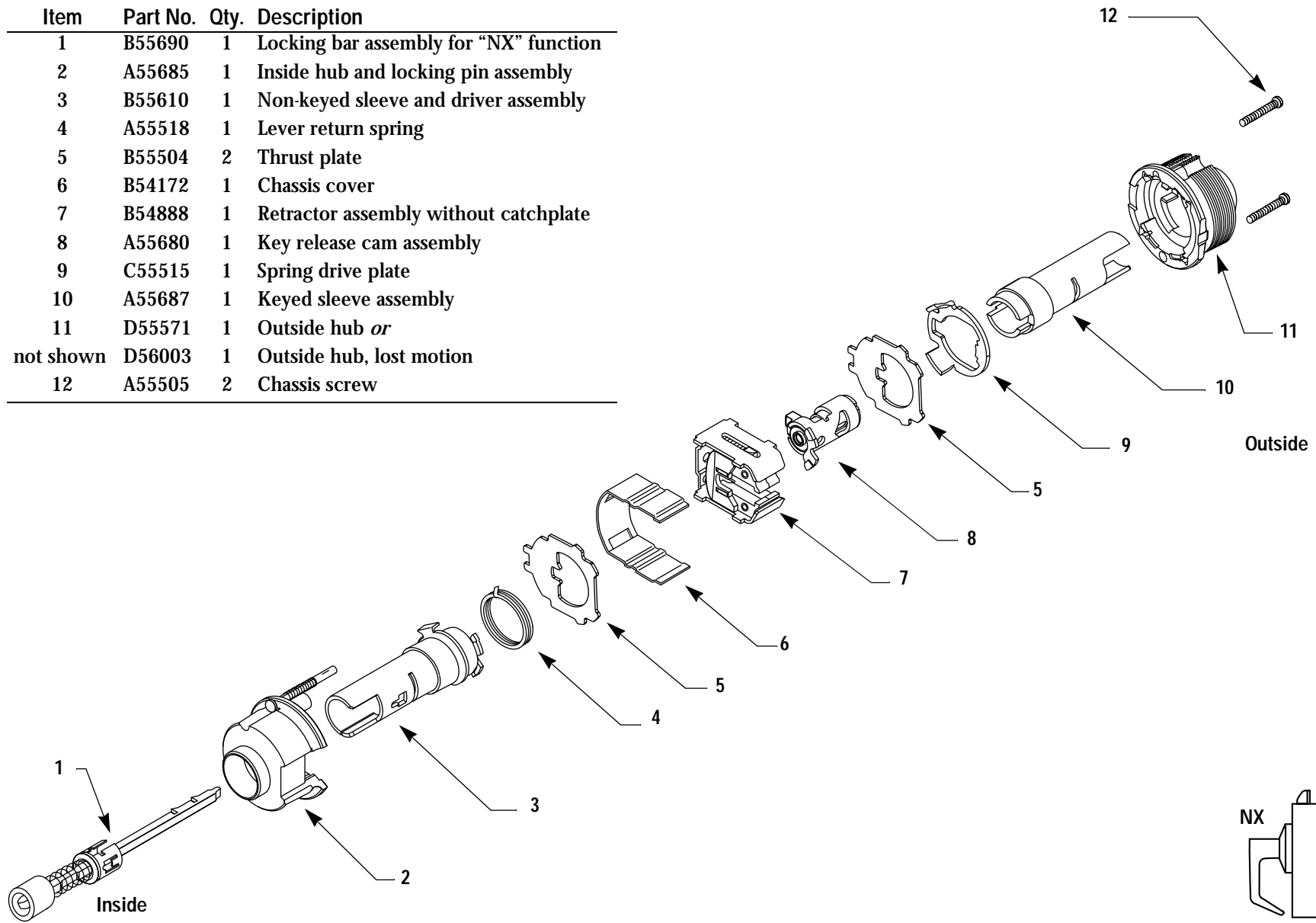


Figure 2.10 NX function exploded diagram



# P FUNCTION CHASSIS—PATIO LOCK (ANSI F77)

Item	Part No.	Qty.	Description
1	B55693	1	Push button assembly
2	A55685	1	Inside hub and locking pin assembly
3	B55610	1	Non-keyed sleeve and driver assembly
4	A55518	2	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	B54886	1	Retractor assembly with long catchplate
8	A55680	1	Key release cam assembly
9	C55515	1	Spring drive plate
10	A55687	1	Keyed sleeve assembly
11	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
12	A55505	2	Chassis screw

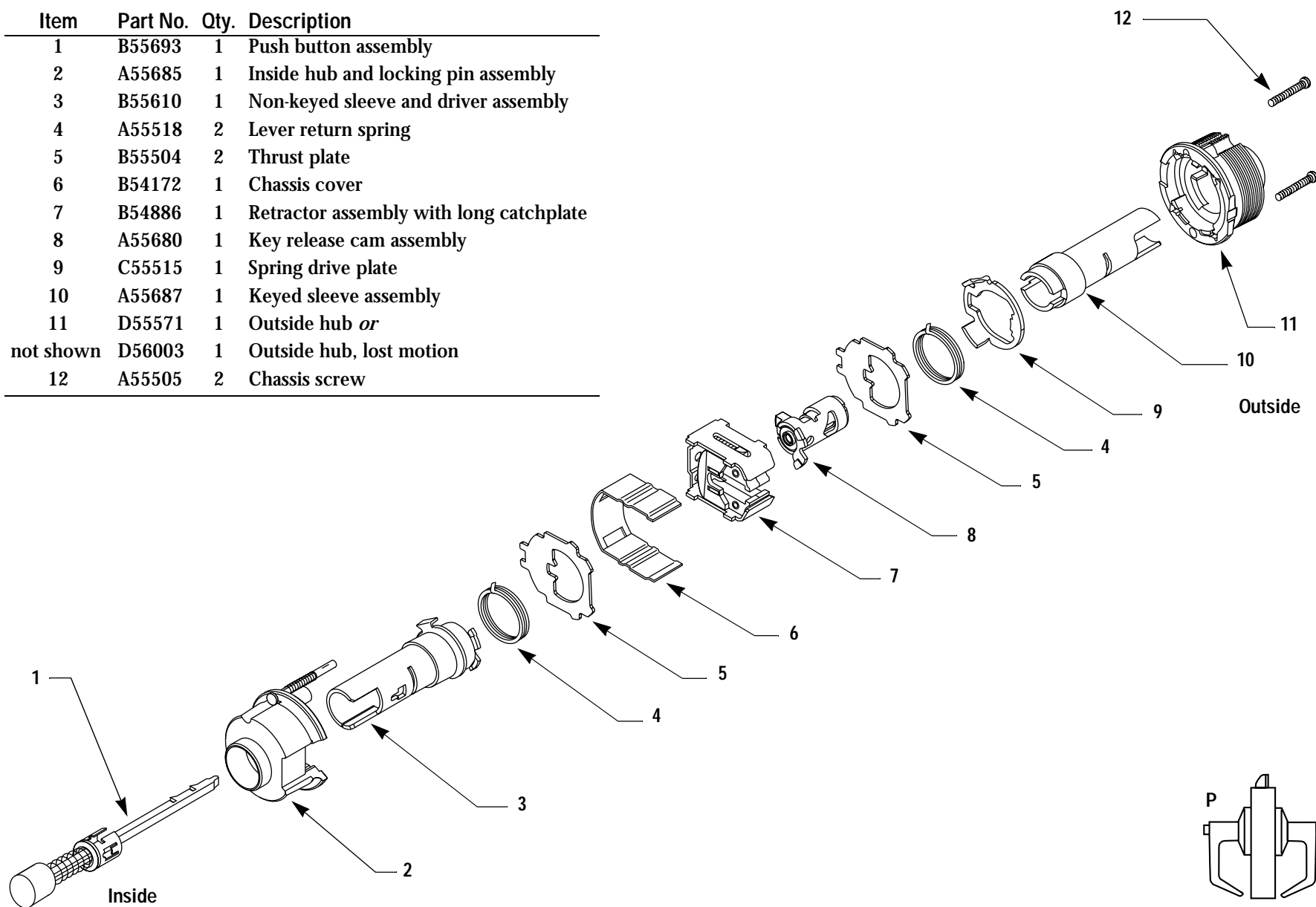


Figure 2.11 P function exploded diagram

## R FUNCTION CHASSIS—CLASSROOM LOCK (ANSI F84)

Item	Part No.	Qty.	Description
1	A55685	1	Inside hub and locking pin assembly
2	B55610	1	Non-keyed sleeve and driver assembly
3	A55518	2	Lever return spring
4	B55504	2	Thrust plate
5	B54172	1	Chassis cover
6	B54888	1	Retractor assembly without catchplate
7	A55681	1	Key release cam assembly
8	C55515	1	Spring drive plate
9	A55687	1	Keyed sleeve assembly <i>or</i>
not shown	A55725	1	Keyed sleeve assembly, non-IC
10	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
11	A55505	2	Chassis screw

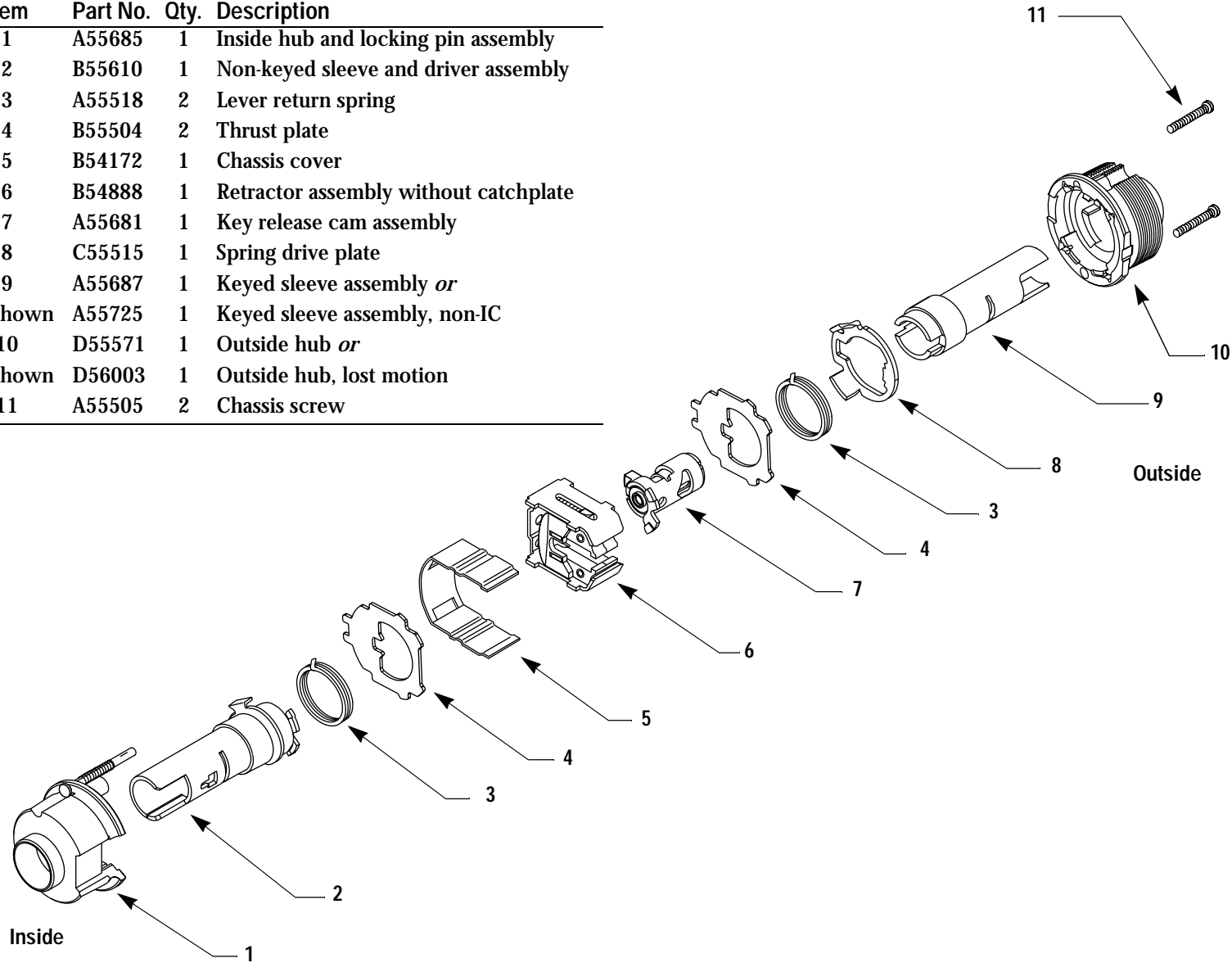
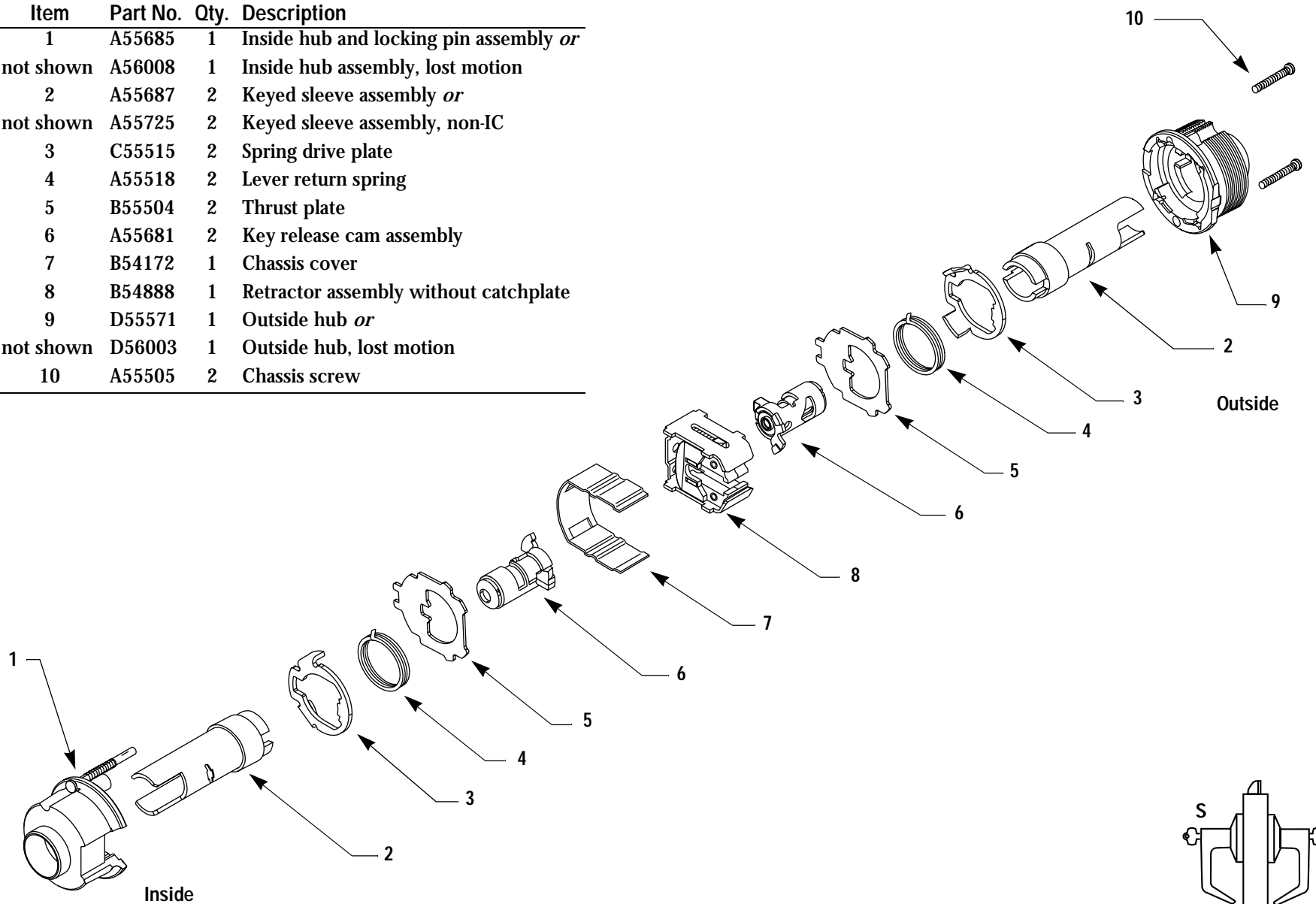


Figure 2.12 R function exploded diagram

# S FUNCTION CHASSIS—COMMUNICATING LOCK (ANSI F80)

Item	Part No.	Qty.	Description
1	A55685	1	Inside hub and locking pin assembly <i>or</i>
not shown	A56008	1	Inside hub assembly, lost motion
2	A55687	2	Keyed sleeve assembly <i>or</i>
not shown	A55725	2	Keyed sleeve assembly, non-IC
3	C55515	2	Spring drive plate
4	A55518	2	Lever return spring
5	B55504	2	Thrust plate
6	A55681	2	Key release cam assembly
7	B54172	1	Chassis cover
8	B54888	1	Retractor assembly without catchplate
9	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
10	A55505	2	Chassis screw



**Figure 2.13** S function exploded diagram

# T FUNCTION CHASSIS—DORMITORY LOCK (ANSI F90)

Item	Part No.	Qty.	Description
1	B55693	1	Push button assembly
2	A55685	1	Inside hub and locking pin assembly
3	B55610	1	Non-keyed sleeve and driver assembly
4	A55518	2	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	B54886	1	Retractor assembly with long catchplate
8	A55681	1	Key release cam assembly
9	C55515	1	Spring drive plate
10	A55687	1	Keyed sleeve assembly <i>or</i>
not shown	A55725	1	Keyed sleeve assembly, non-IC
11	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
12	A55505	2	Chassis screw

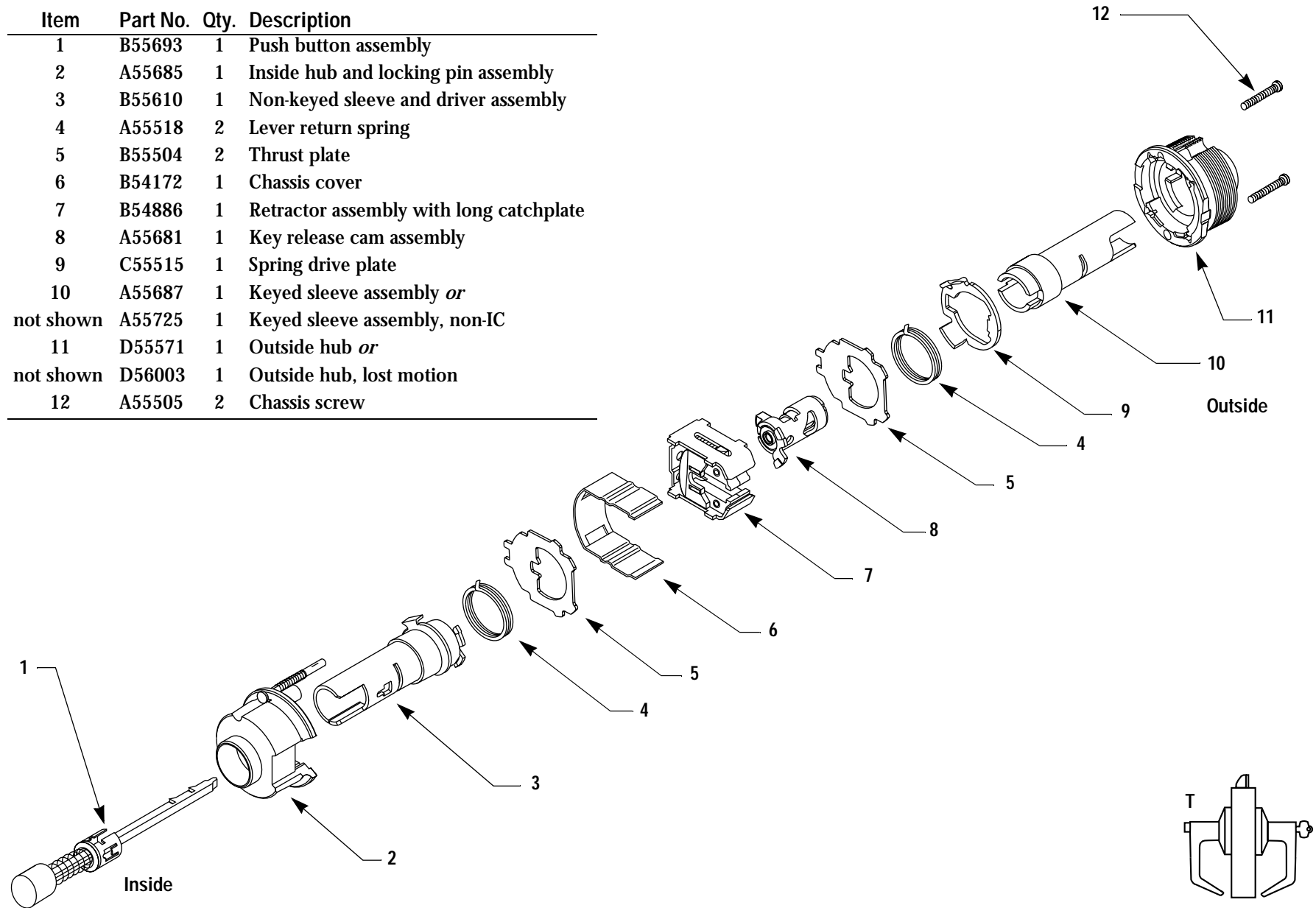


Figure 2.14 T function exploded diagram

# W FUNCTION CHASSIS—UTILITY OR INSTITUTIONAL LOCK (ANSI F87)

Item	Part No.	Qty.	Description
1	A55685	1	Inside hub and locking pin assembly <i>or</i>
not shown	A56008	1	Inside hub assembly, lost motion
2	A55687	2	Keyed sleeve assembly <i>or</i>
not shown	A55725	2	Keyed sleeve assembly, non-IC
3	C55515	2	Spring drive plate
4	B55504	2	Thrust plate
5	A55675	2	Key release cam assembly
6	B54172	1	Chassis cover
7	B54888	1	Retractor assembly without catchplate
8	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
9	A55505	2	Chassis screw

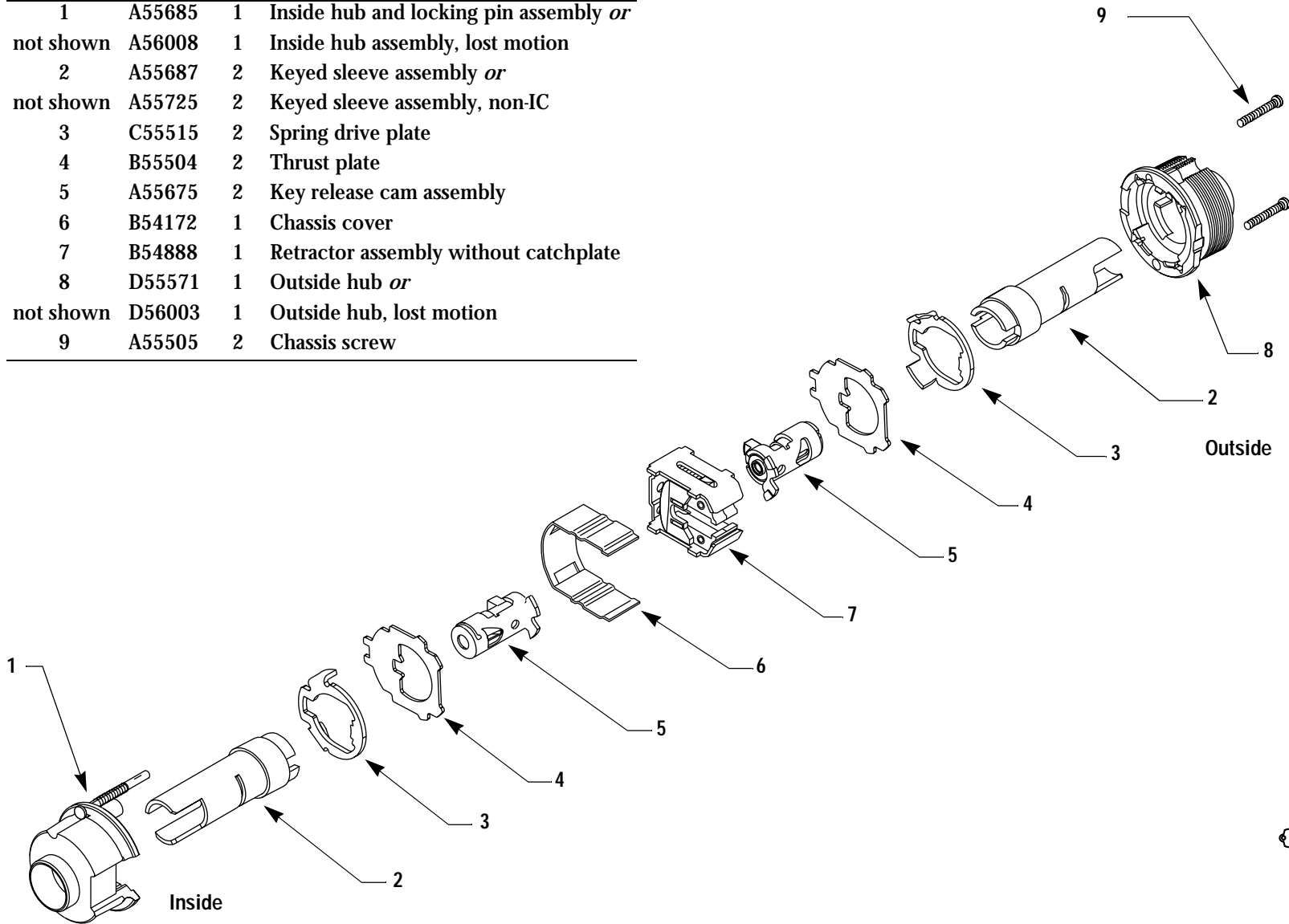


Figure 2.15 W function exploded diagram

## Y FUNCTION CHASSIS—EXIT LOCK

Item	Part No.	Qty.	Description
1	A55685	1	Inside hub and locking pin assembly
2	B55610	1	Non-keyed sleeve and driver assembly
3	A55518	1	Lever return spring
4	B55504	1	Thrust plate
5	B54172	1	Chassis cover
6	B54888	1	Retractor assembly without catchplate
7	B54809	1	Outside hub and plate assembly
8	A55511	2	Chassis screw

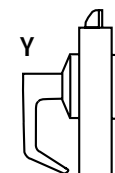
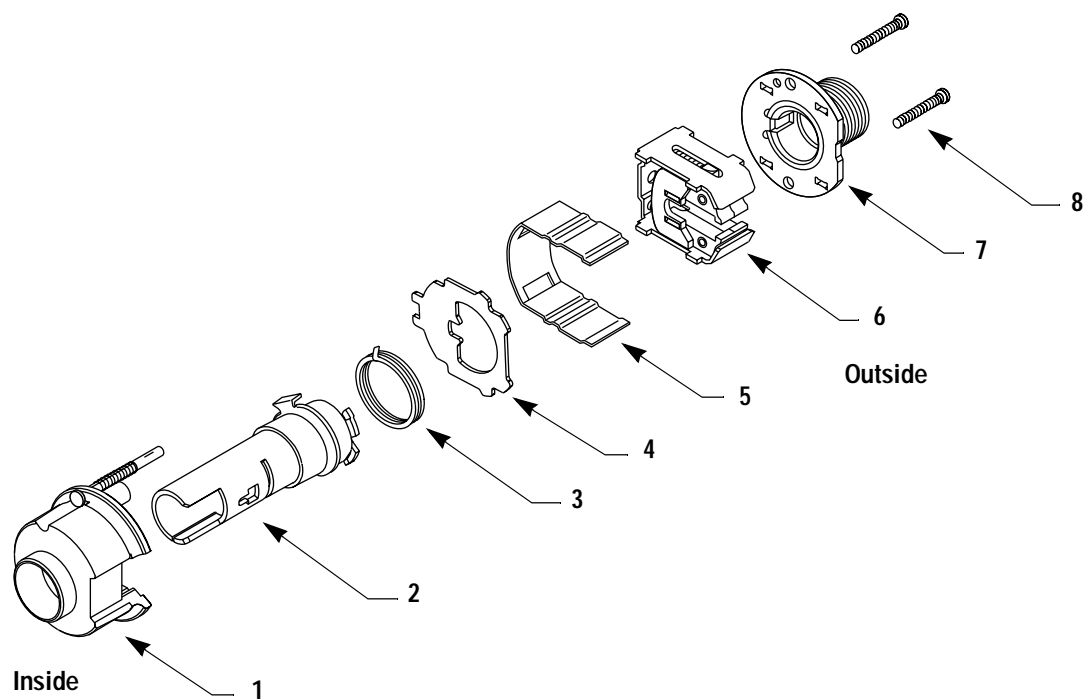


Figure 2.16 Y function exploded diagram

## NON-STANDARD FUNCTIONS

### A FUNCTION CHASSIS—ENTRANCE LOCK (ANSI F81)

Item	Part No.	Qty.	Description
1	B55692	1	Turn button assembly
2	A55685	1	Inside hub and locking pin assembly
3	B55610	1	Non-keyed sleeve and driver assembly
4	A55518	2	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	B54888	1	Retractor assembly without catchplate
8	A55673	1	Key release cam assembly
9	C55515	1	Spring drive plate
10	A55687	1	Keyed sleeve assembly <i>or</i>
not shown	A55725	1	Keyed sleeve assembly, non-IC
11	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
12	A55505	2	Chassis screw

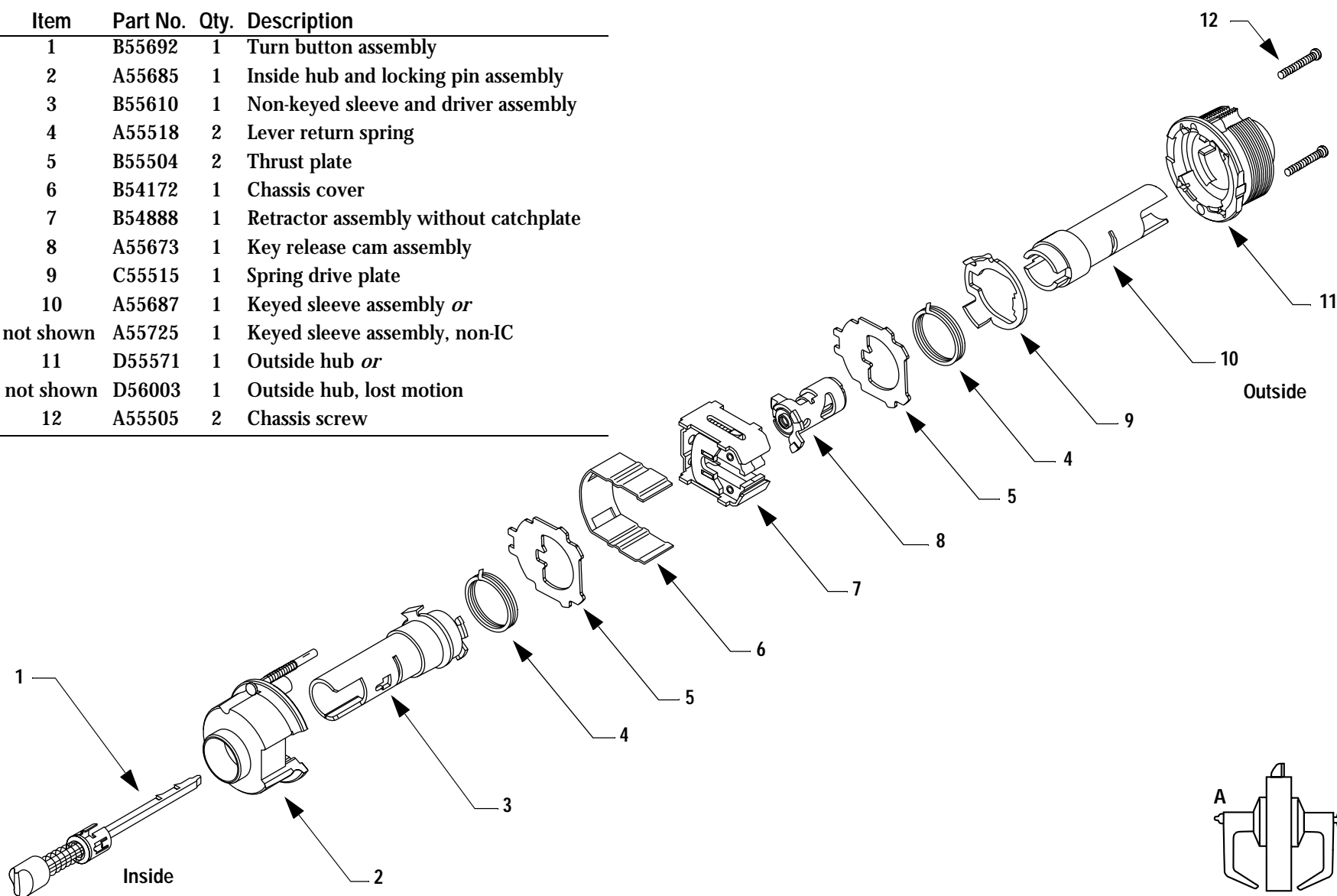


Figure 2.17 A function exploded diagram

## B FUNCTION CHASSIS—OFFICE LOCK (ANSI F82)

Item	Part No.	Qty.	Description
1	B55693	1	Push button assembly
2	A55685	1	Inside hub and locking pin assembly
3	B55610	1	Non-keyed sleeve and driver assembly
4	A55518	2	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	B54887	1	Retractor assembly with short catchplate
8	A55673	1	Key release cam assembly
9	C55515	1	Spring drive plate
10	A55687	1	Keyed sleeve assembly <i>or</i>
not shown	A55725	1	Keyed sleeve assembly, non-IC
11	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
12	A55505	2	Chassis screw

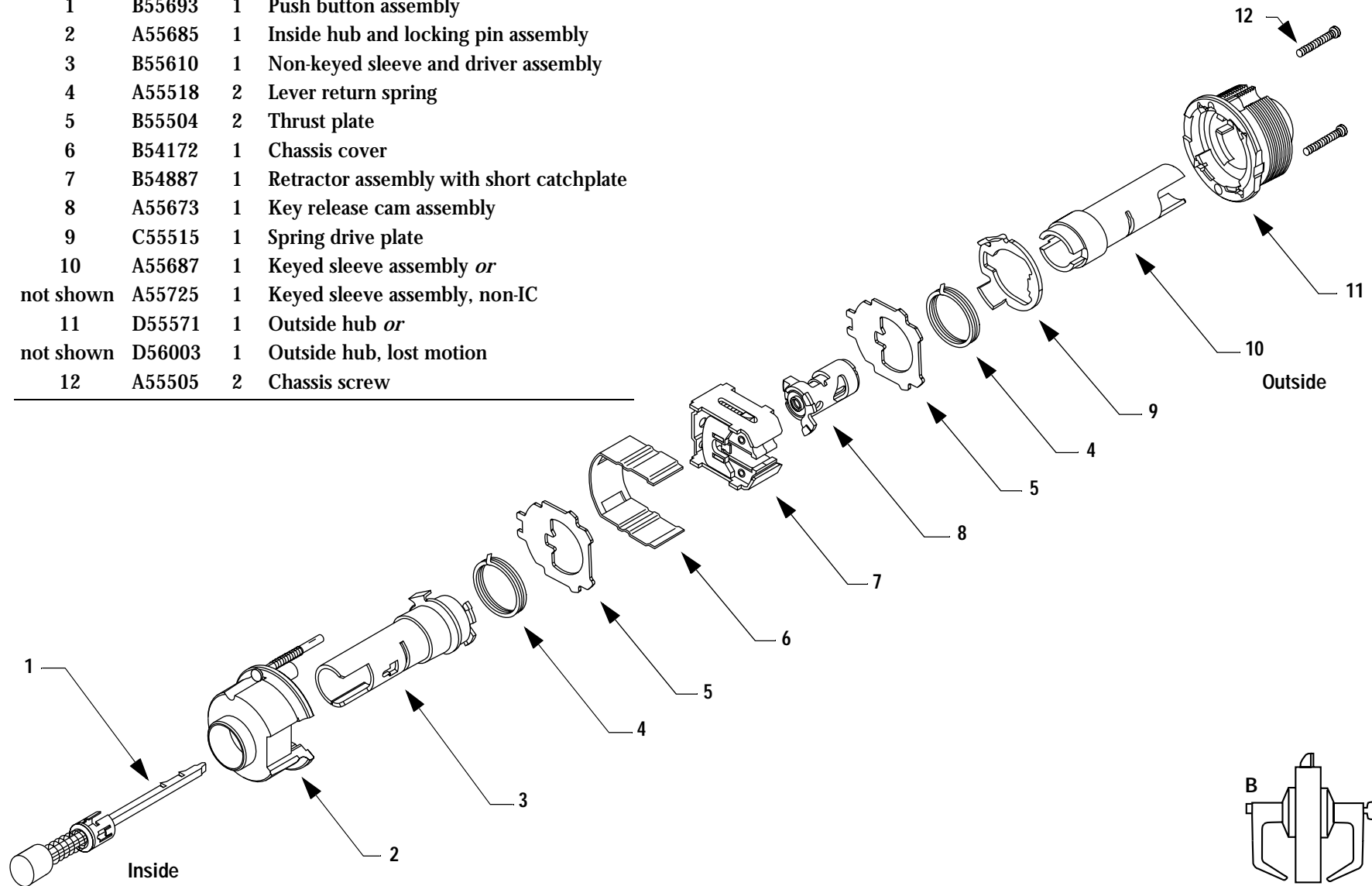


Figure 2.18 B function exploded diagram



## DR FUNCTION CHASSIS—SPECIAL LOCK

Item	Part No.	Qty.	Description
1	B55056	1	Inside hub, side plate, and locking pin assembly <i>or</i>
not shown	A56008	1	Inside hub assembly, lost motion
2	A55687	2	Keyed sleeve assembly <i>or</i>
not shown	A55725	2	Keyed sleeve assembly, non-IC
3	C55515	2	Spring drive plate
4	A55518	1	Lever return spring
5	B55504	2	Thrust plate
6	A55681	1	Key release cam assembly
7	B54172	1	Chassis cover
8	B54888	1	Retractor assembly without catchplate
9	A55675	1	Key release cam assembly
10	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
11	A55505	2	Chassis screw

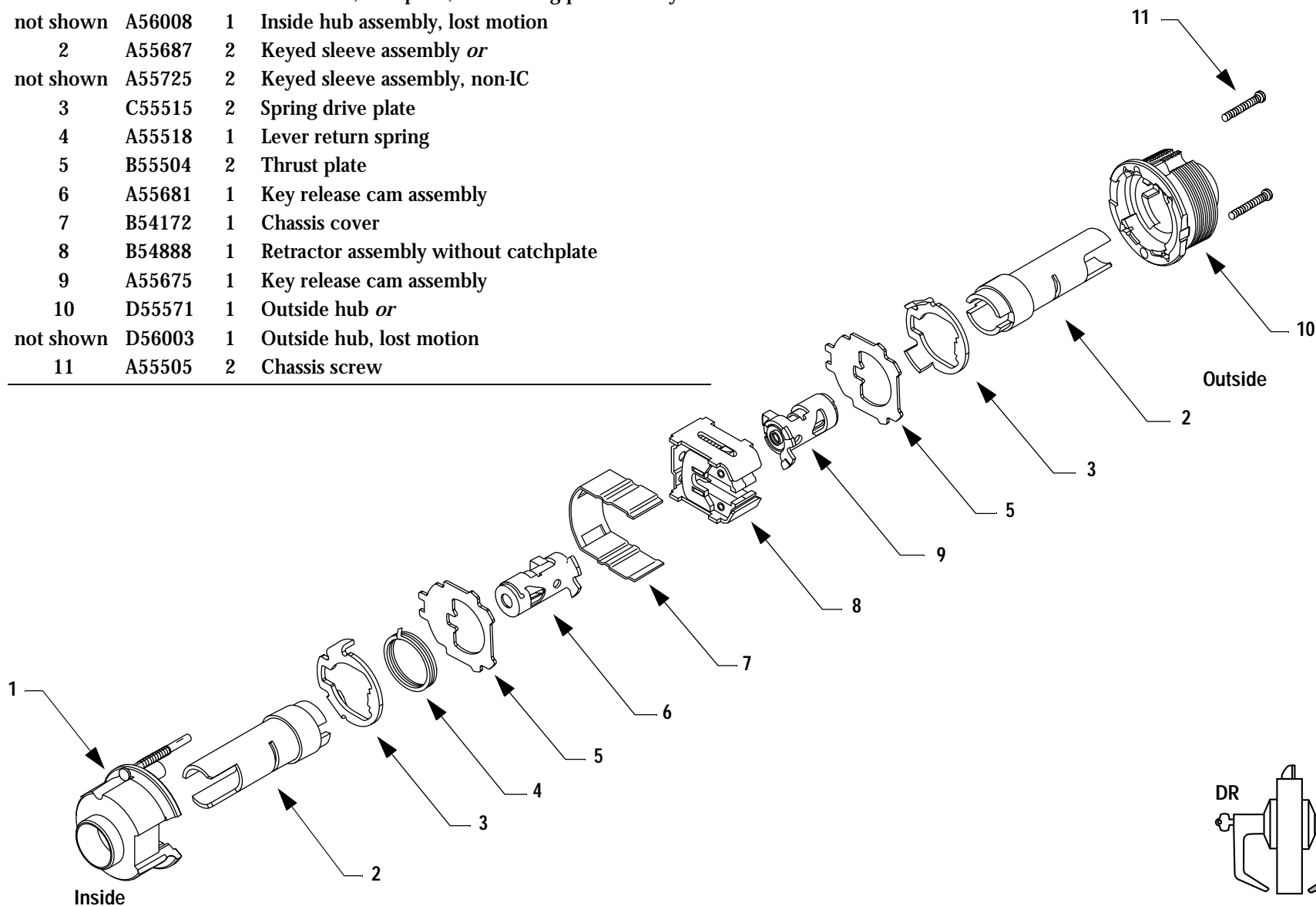
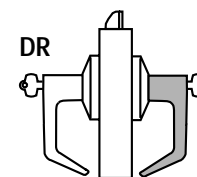


Figure 2.19 DR function exploded diagram



## DZ FUNCTION CHASSIS—CLOSET OR STOREROOM LOCK

Item	Part No.	Qty.	Description
1	A54736	1	Turn blade assembly for Z function
2	B54810	1	Inside hub and side plate assembly
3	A54835	1	Non-keyed sleeve and driver assembly
4	B54172	1	Chassis cover
5	B54888	1	Retractor assembly without catchplate
6	A55675	1	Key release cam assembly
7	B55504	1	Thrust plate
8	C55515	1	Spring drive plate
9	A55687	1	Keyed sleeve assembly <i>or</i>
not shown	A55725	1	Keyed sleeve assembly, non-IC
10	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
111	A55511	2	Chassis screw

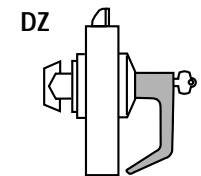
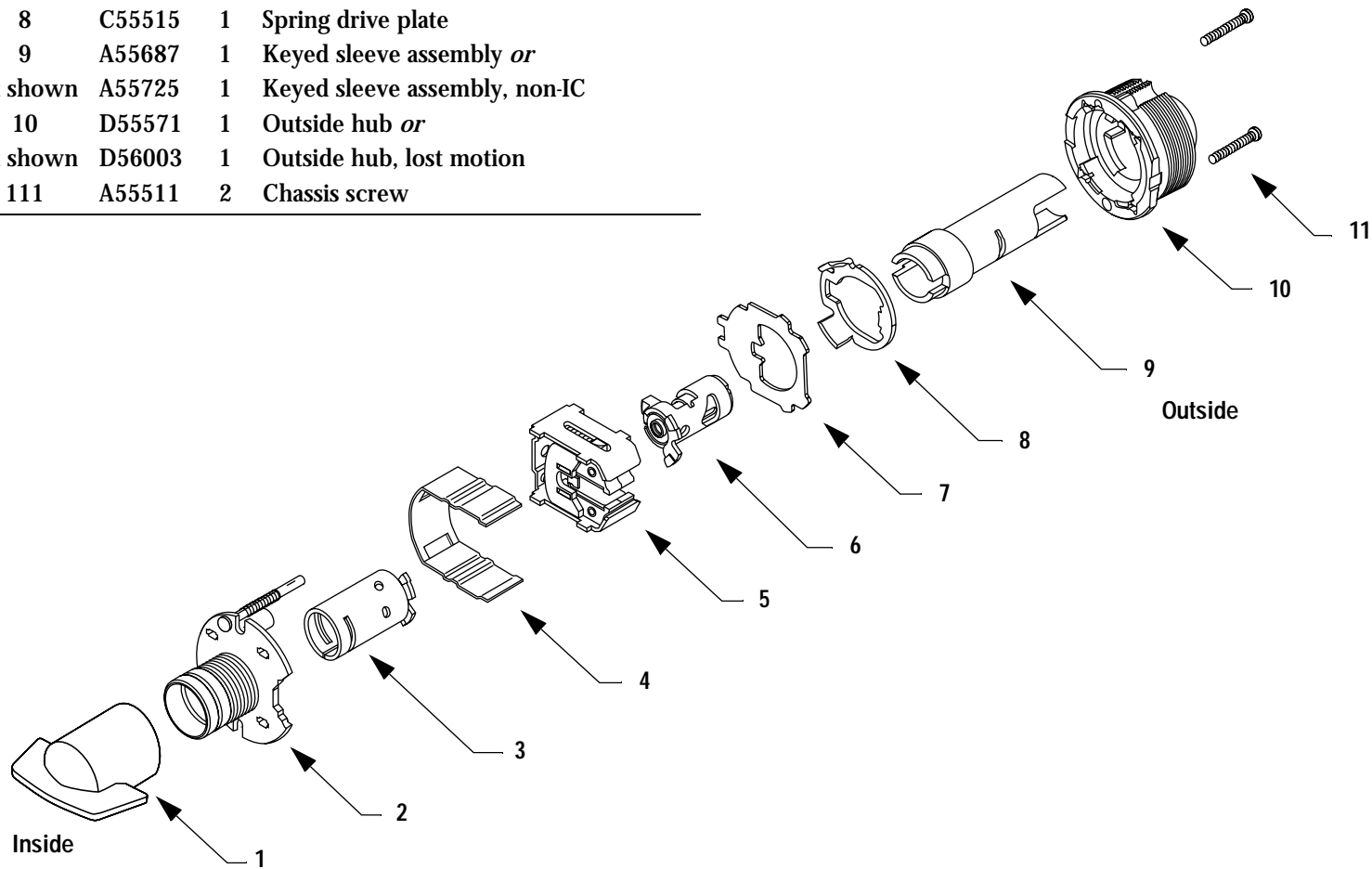


Figure 2.20 DZ function exploded diagram

# EA FUNCTION CHASSIS—ENTRANCE OR OFFICE LOCK

Item	Part No.	Qty.	Description
1	B55694	1	Slotted button assembly
2	A55685	1	Inside hub and locking pin assembly
3	B55610	1	Non-keyed sleeve and driver assembly
4	B55518	2	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	B54887	1	Retractor assembly with short catchplate
8	A55673	1	Key release cam assembly
9	C55515	1	Spring drive plate
10	A55687	1	Keyed sleeve assembly <i>or</i>
not shown	A55725	1	Keyed sleeve assembly, non-IC
11	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
12	A55505	2	Chassis screw

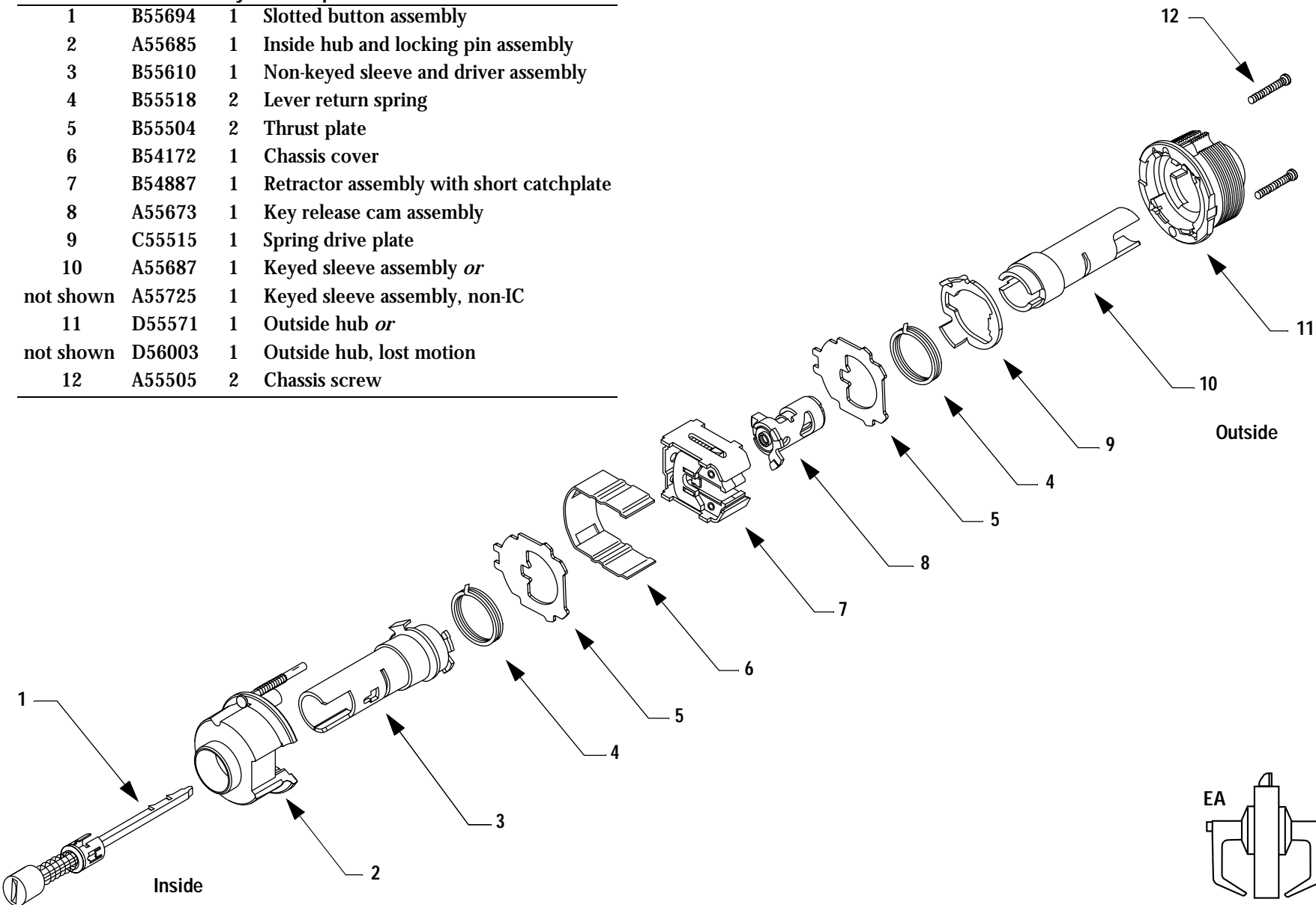


Figure 2.21 EA function exploded diagram

# IN FUNCTION CHASSIS—INTRUDER LOCK

Item	Part No.	Qty.	Description
1	A55685	1	Inside hub and locking pin assembly <i>or</i>
not shown	A56008	1	Inside hub and locking pin assembly, lost motion
2	A55687	2	Keyed sleeve assembly <i>or</i>
not shown	A55725	2	Keyed sleeve assembly, non-IC
3	C55515	2	Spring drive plate
4	A55518	2	Lever return spring
5	B55504	2	Thrust plate
6	A56038	1	Key release cam assembly
7	B54172	1	Chassis cover
8	A54195	1	Locking bar
9	B54888	1	Retractor assembly without catchplate
10	A55676	1	Key release cam assembly
11	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
12	A55505	2	Chassis screw

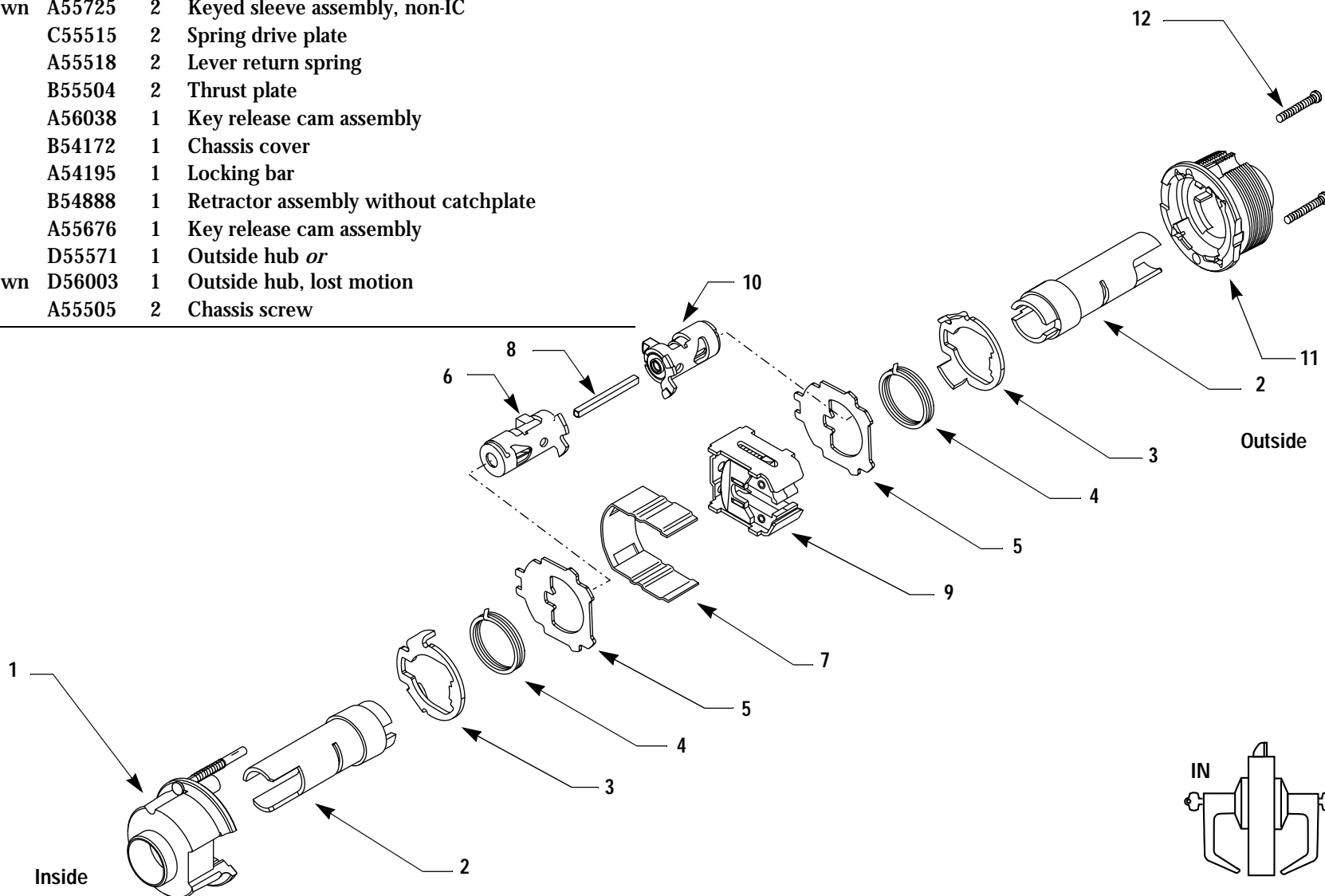


Figure 2.22 IN function exploded diagram

# LL FUNCTION CHASSIS—HOSPITAL PRIVACY LOCK

Item	Part No.	Qty.	Description
1	B55693	1	Push button assembly
2	A55685	1	Inside hub and locking pin assembly
3	B55610	1	Non-keyed sleeve and driver assembly
4	B55518	2	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	B54886	1	Retractor assembly with long catchplate
8	A55673	1	Key release cam assembly
9	C55515	1	Spring drive plate
10	A55701	1	Keyed sleeve assembly for "M" function
11	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
12	B54210	1	6 Pin throw member
13	A55699	1	Outside button assembly for "LL" function <sup>a</sup>
14	A55505	2	Chassis screw

a. Fits into the button lever, not shown. See [page 2-47](#) for button levers.

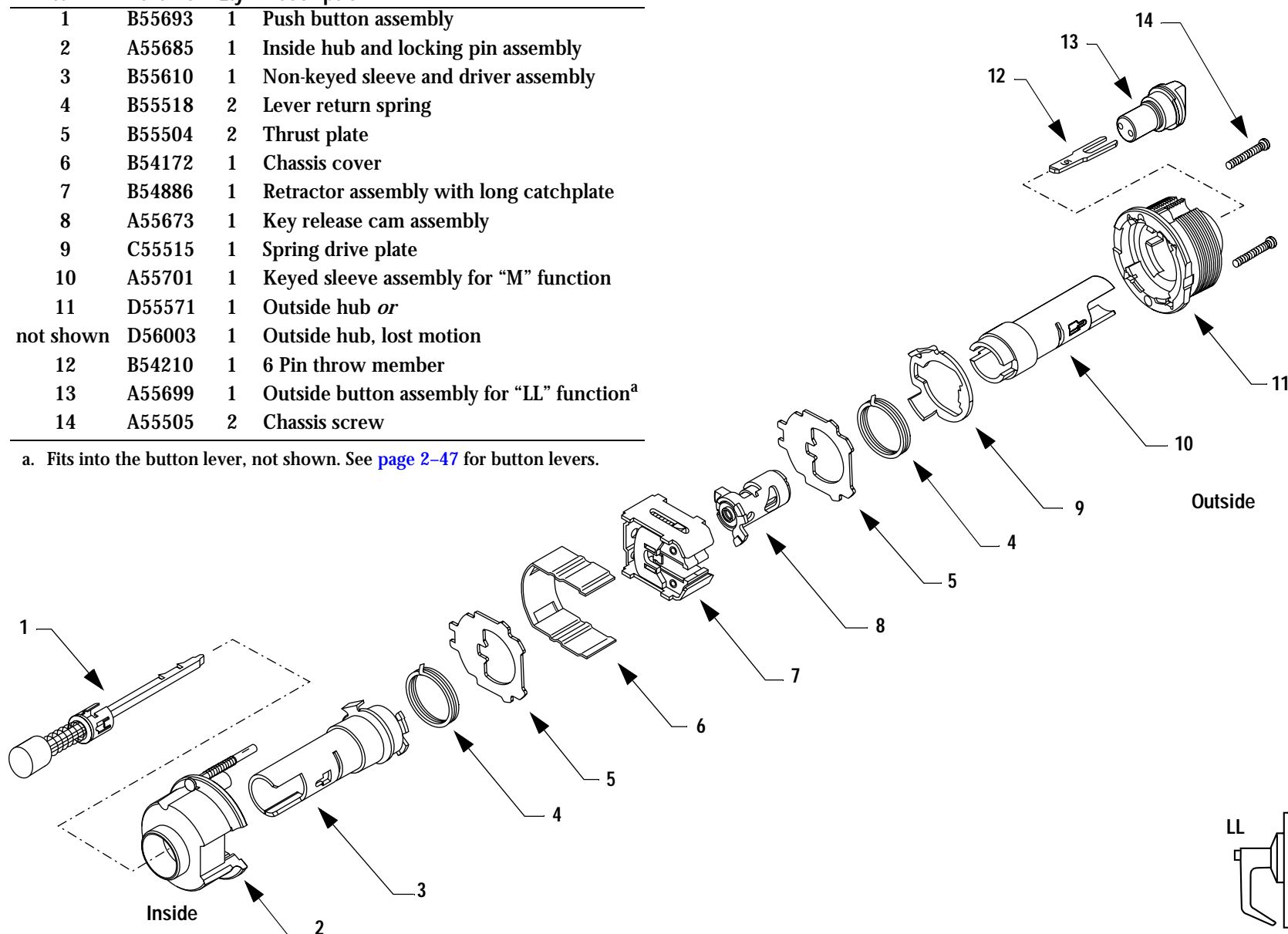


Figure 2.23 LL function exploded diagram

# M FUNCTION CHASSIS—COMMUNICATING LOCK (ANSI F78)

Item	Part No.	Qty.	Description
1	A55685	1	Inside hub and locking pin assembly or
not shown	A56008	1	Inside hub and locking pin assembly, lost motion
2	A55685	1	Inside hub and locking pin assembly
3	B55610	1	Non-keyed sleeve and driver assembly
4	B55518	2	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	B54888	1	Retractor assembly without catchplate
8	A55678	2	Key release cam assembly
9	A55540	1	Bridge bar
10	C55515	1	Spring drive plate
11	A55701	1	Keyed sleeve assembly for "M" function
12	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
13	A55505	2	Chassis screw

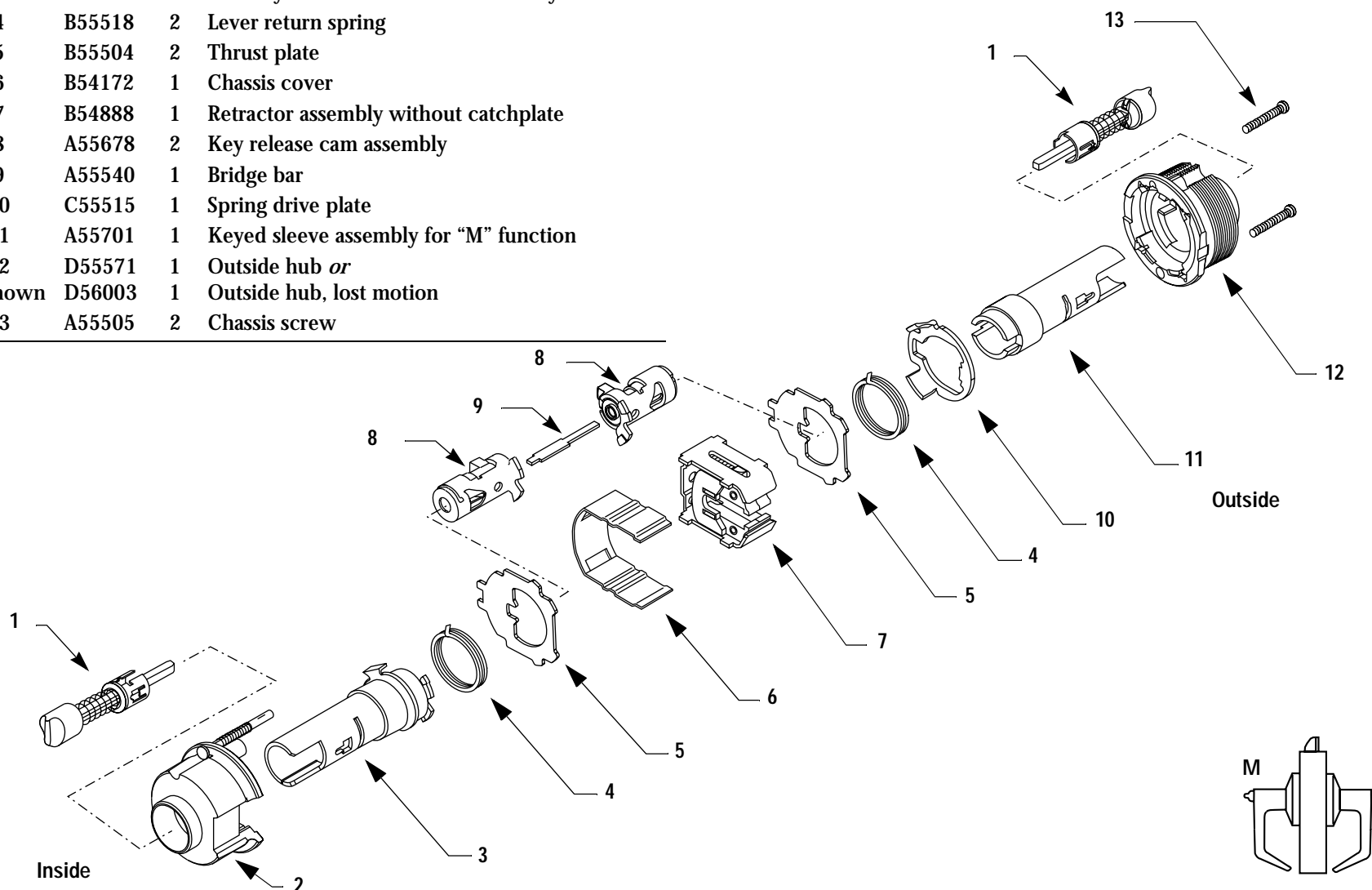


Figure 2.24 M function exploded diagram

## Q FUNCTION CHASSIS—EXIT LOCK (ANSI F83)

Item	Part No.	Qty.	Description
1	B55692	1	Turn button assembly
2	A55685	1	Inside hub and locking pin assembly
3	B55610	1	Non-keyed sleeve and driver assembly
4	B55518	2	Lever return spring
5	B55504	2	Thrust plate
6	B54172	1	Chassis cover
7	B54888	1	Retractor assembly without catchplate
8	A55680	1	Key release cam assembly
9	C55515	1	Spring drive plate
10	A55687	1	Keyed sleeve assembly
11	D55571	1	Outside hub
12	A55505	2	Chassis screw

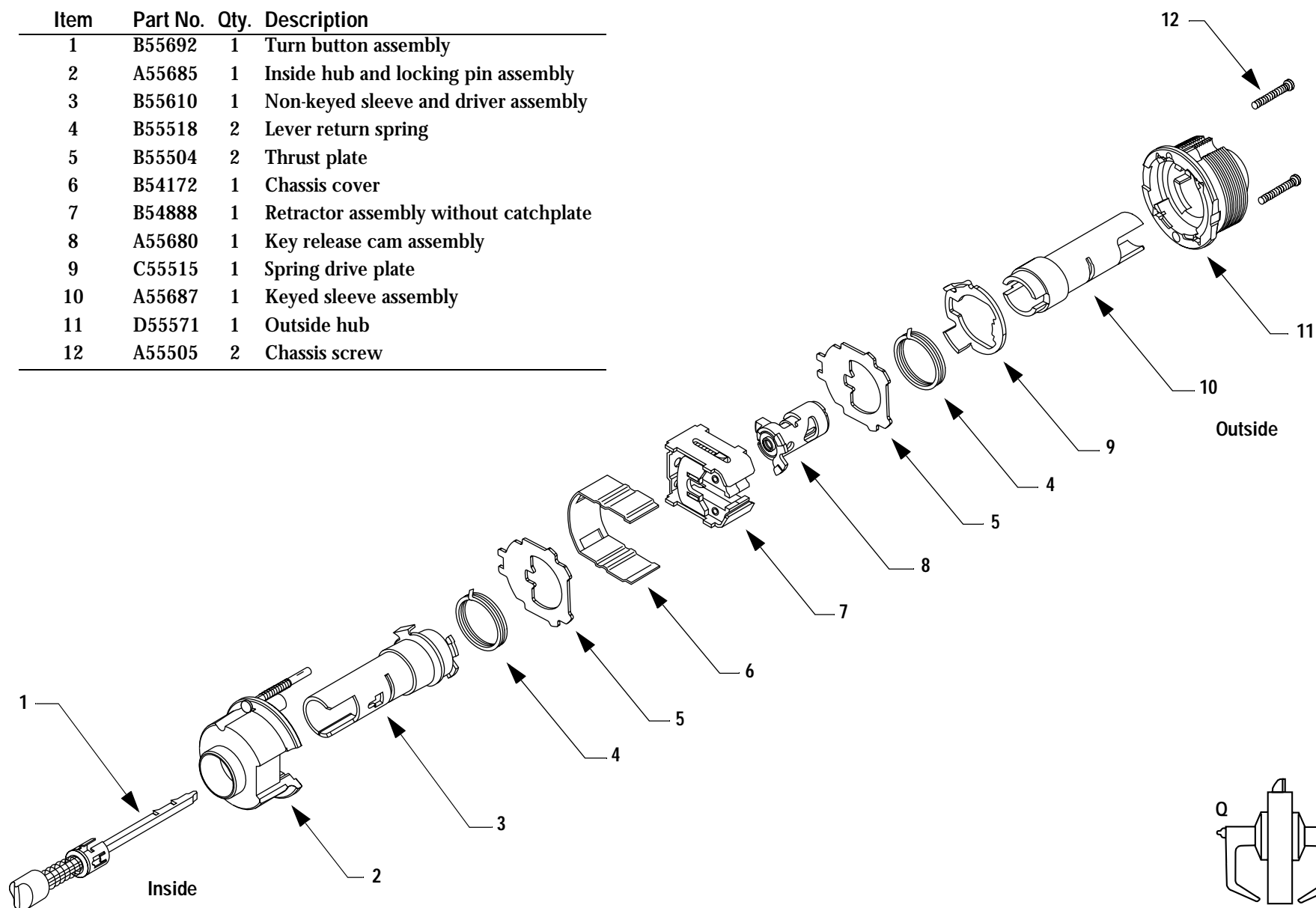


Figure 2.25 Q function exploded diagram

## RD FUNCTION CHASSIS—SPECIAL LOCK

Item	Part No.	Qty.	Description
1	B55685	1	Inside hub and locking pin assembly <i>or</i>
not shown	A56008	1	Inside hub assembly, lost motion
2	A55687	2	Keyed sleeve assembly <i>or</i>
not shown	A55725	2	Keyed sleeve assembly, non-IC
3	C55515	2	Spring drive plate
4	B55504	2	Thrust plate
5	A55675	1	Key release cam assembly
6	B54172	1	Chassis cover
7	B54888	1	Retractor assembly without catchplate
8	B55681	1	Key release cam assembly
9	B55518	1	Lever return spring
10	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
11	A55505	2	Chassis screw

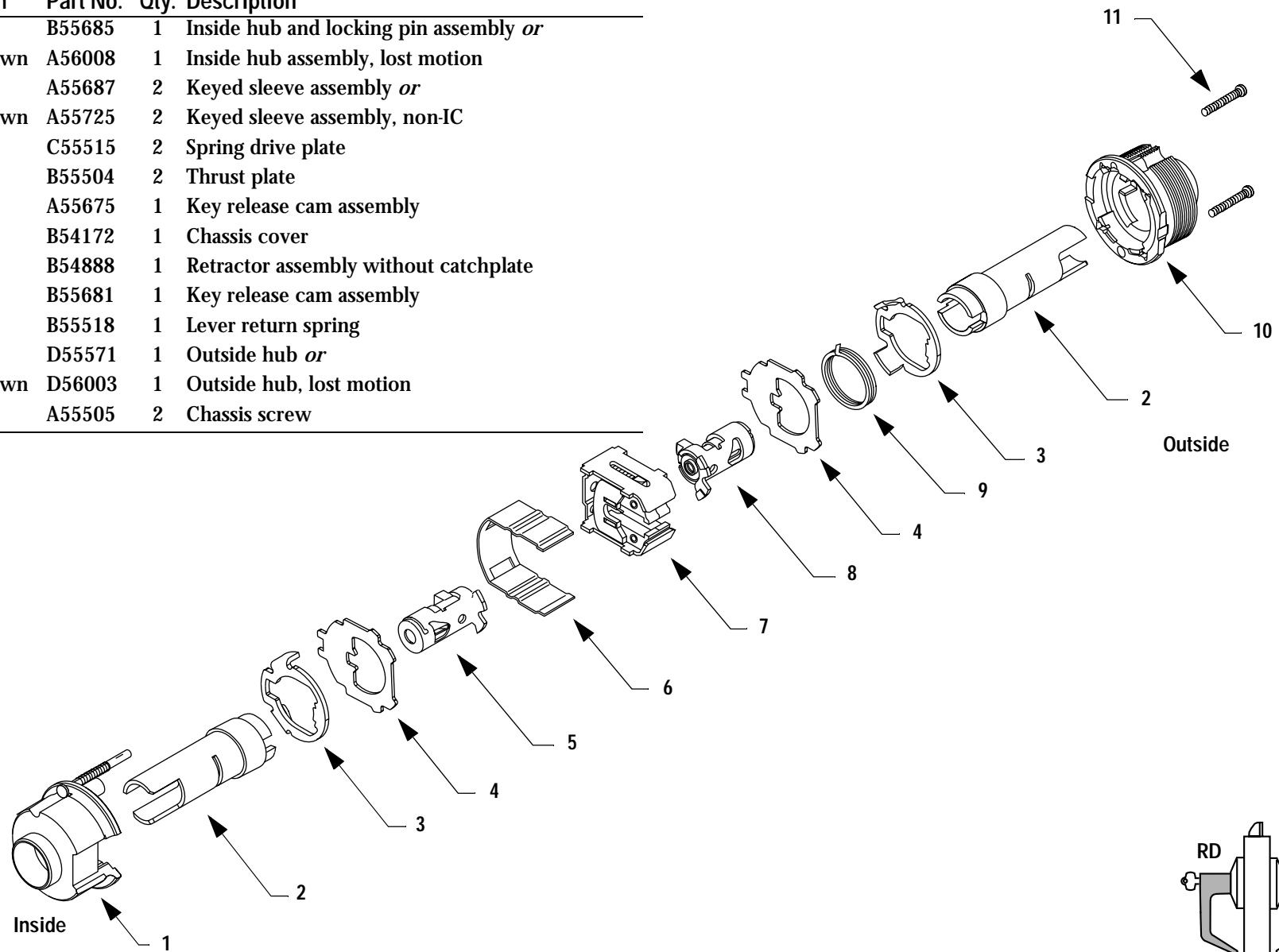


Figure 2.26 RD function exploded diagram



RZ FUNCTION CHASSIS—CLOSET OR STOREROOM LOCK

Item	Part No.	Qty.	Description
1	A54736	1	Turn blade assembly for Z function
2	A54810	1	Inside hub and side plate assembly
3	A54835	1	Non-keyed sleeve and driver assembly
4	B54172	1	Chassis cover
5	B54888	1	Retractor assembly without catchplate
6	B55681	1	Key release cam assembly
7	B55504	1	Thrust plate
8	B55518	1	Lever return spring
9	C55515	1	Spring drive plate
10	A55687	1	Keyed sleeve assembly <i>or</i>
not shown	A55725	1	Keyed sleeve assembly, non-IC
11	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
12	A55511	2	Chassis screw

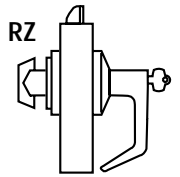
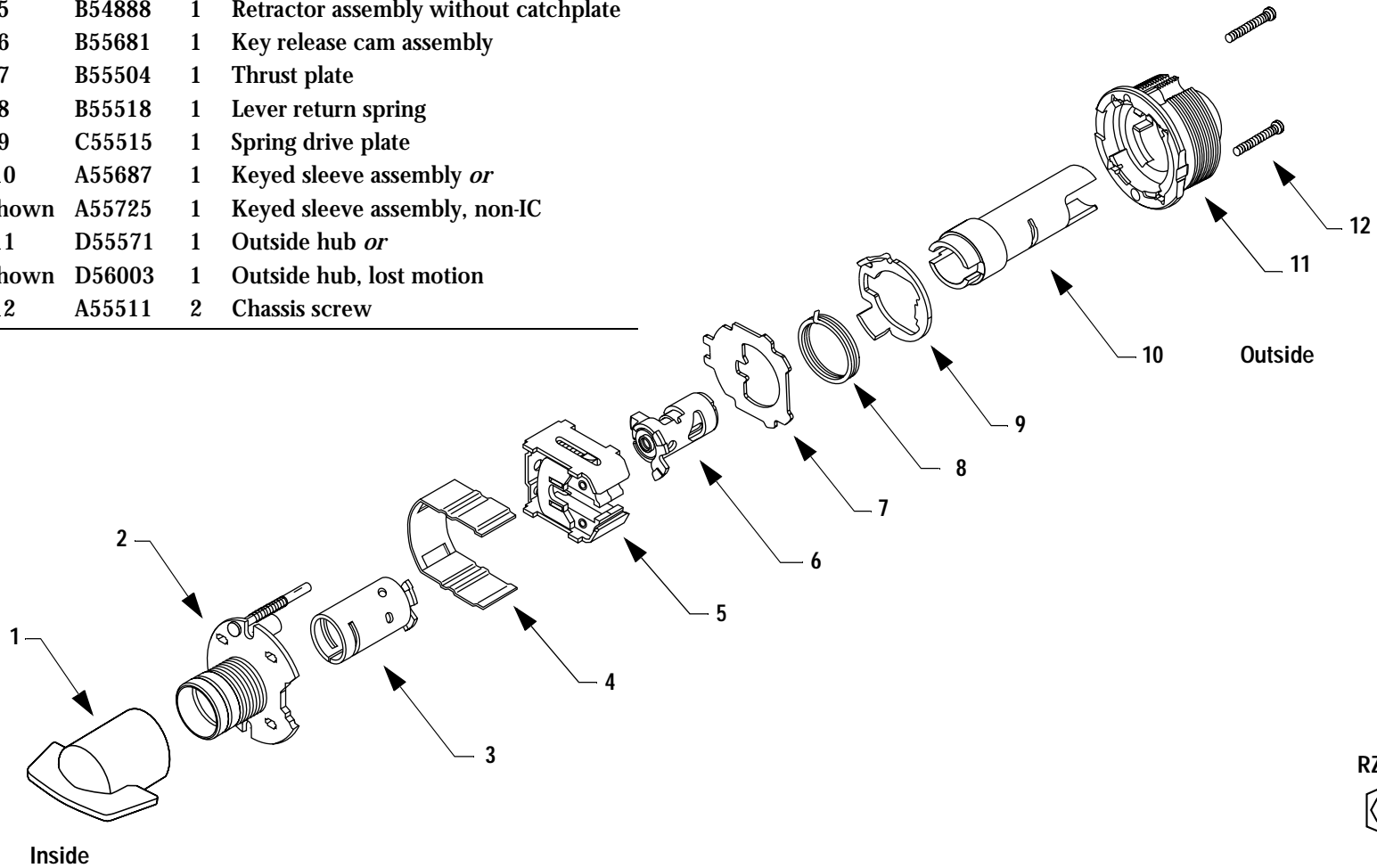


Figure 2.27 RZ function exploded diagram

## XD FUNCTION CHASSIS—SPECIAL LOCK

Item	Part No.	Qty.	Description
1	A55685	1	Inside hub and locking pin assembly <i>or</i>
not shown	A56008	1	Inside hub assembly, lost motion
2	A55687	2	Keyed sleeve assembly <i>or</i>
not shown	A55725	1	Keyed sleeve assembly, non-IC
3	C55515	2	Spring drive plate
4	B55504	2	Thrust plate
5	A55675	1	Key release cam assembly
6	B54172	1	Chassis cover
7	B54888	1	Retractor assembly without catchplate
8	B55682	1	Key release cam assembly
9	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
10	A55505	2	Chassis screw

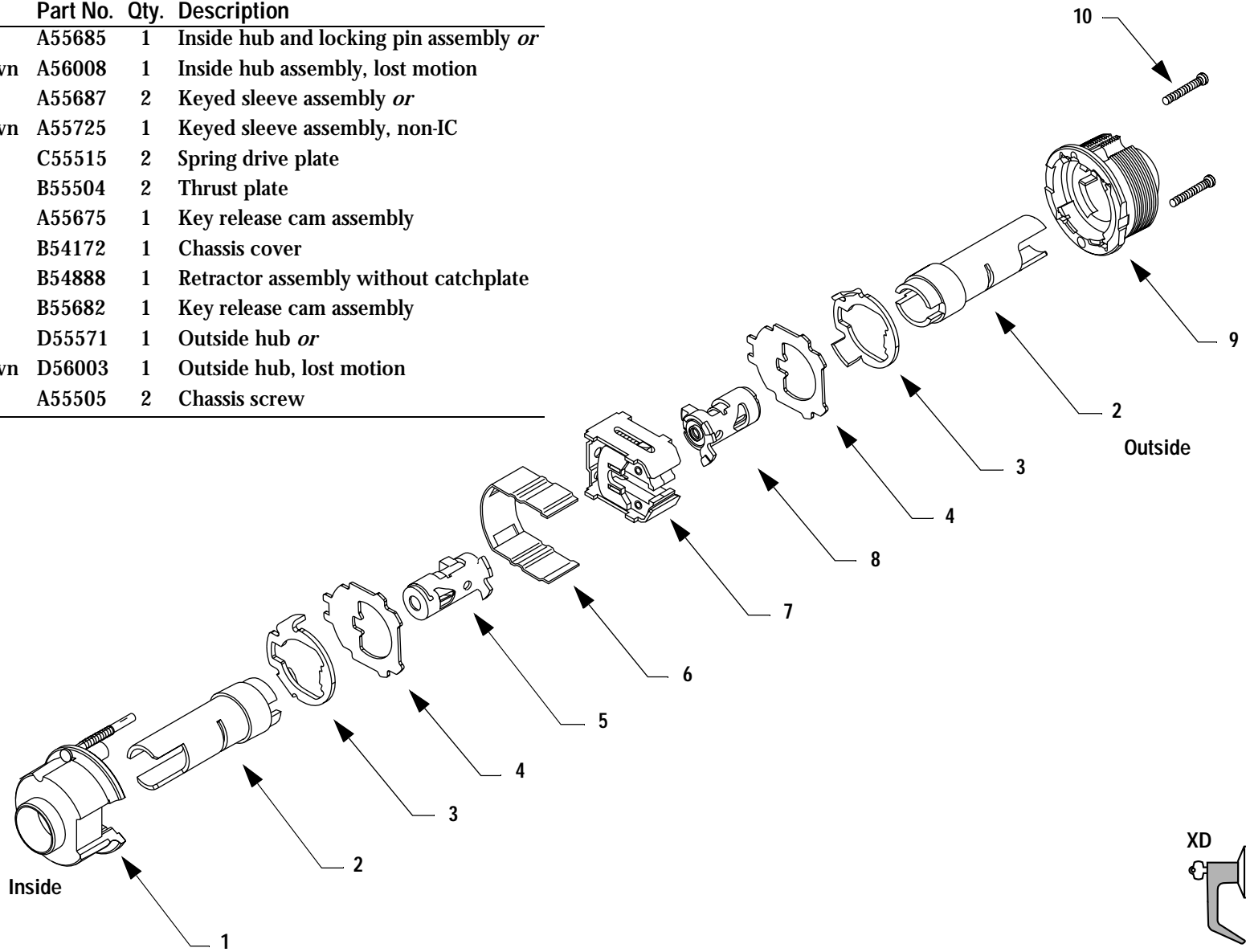


Figure 2.28 XD function exploded diagram

## XR FUNCTION CHASSIS—SPECIAL LOCK

Item	Part No.	Qty.	Description
1	A55685	1	Inside hub and locking pin assembly <i>or</i>
not shown	A56008	1	Inside hub assembly, lost motion
2	A55687	2	Keyed sleeve assembly <i>or</i>
not shown	A55725	2	Keyed sleeve assembly, non-IC
3	C55515	2	Spring drive plate
4	B55518	1	Lever return spring
5	B55504	2	Thrust plate
6	A55681	1	Key release cam assembly
7	B54172	1	Chassis cover
8	B54888	1	Retractor assembly without catchplate
9	B55682	1	Key release cam assembly
10	D55571	1	Outside hub <i>or</i>
not shown	D56003	1	Outside hub, lost motion
11	A55505	2	Chassis screw

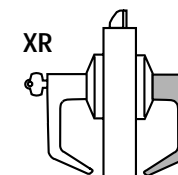
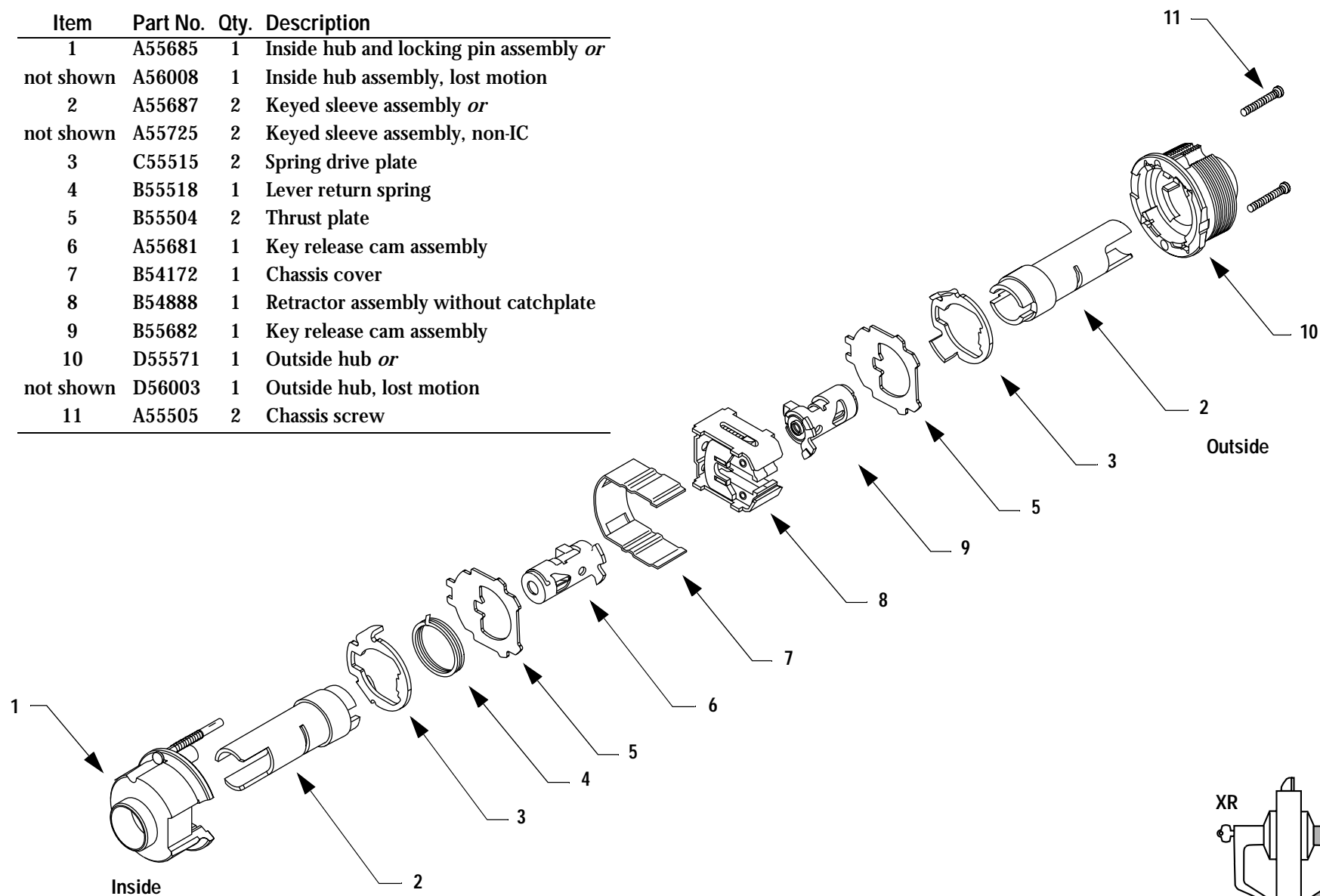
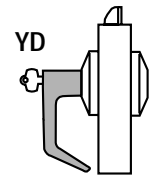
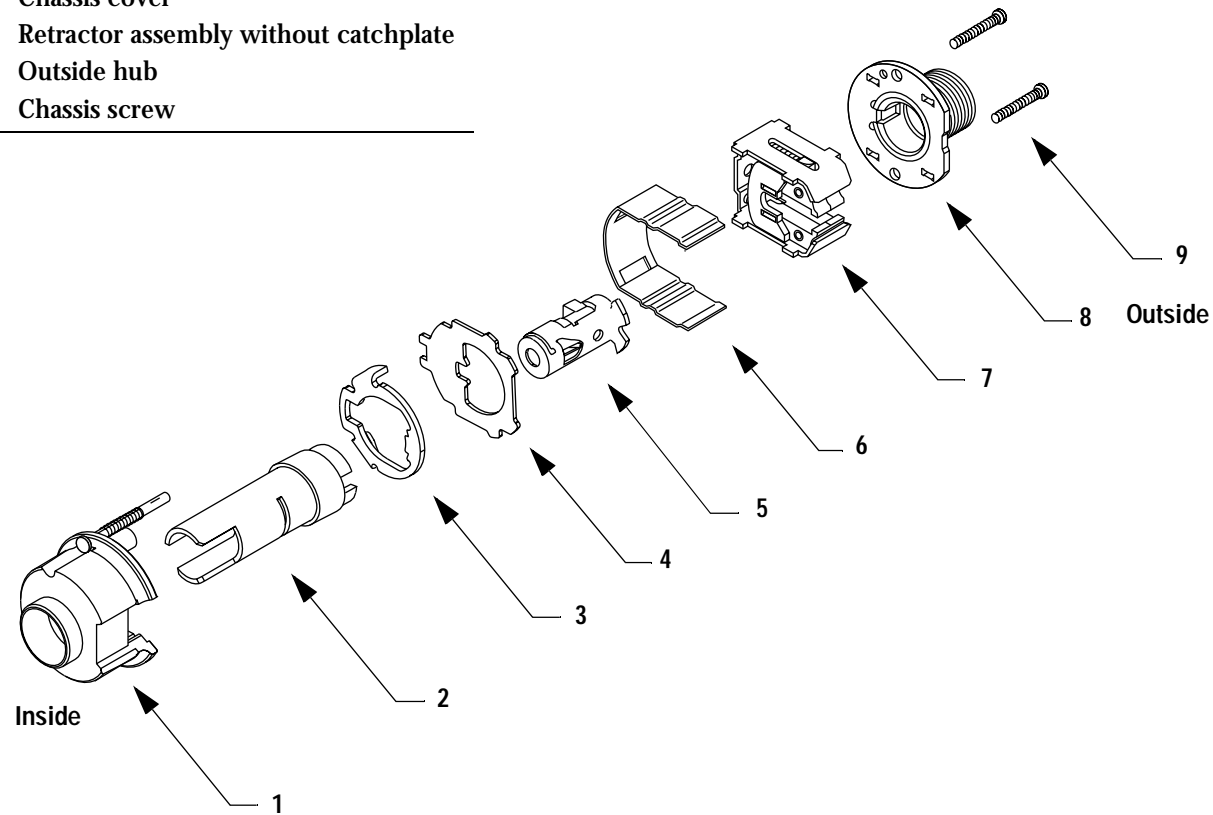


Figure 2.29 XR function exploded diagram

# YD FUNCTION CHASSIS—EXIT LOCK

Item	Part No.	Qty.	Description
1	A55685	1	Inside hub and locking pin assembly <i>or</i>
not shown	A56008	1	Inside hub assembly, lost motion
2	A55687	1	Keyed sleeve assembly <i>or</i>
not shown	A55725	1	Keyed sleeve assembly, non-IC
3	C55515	1	Spring drive plate
4	B55504	1	Thrust plate
5	A55675	1	Key release cam assembly
6	B54172	1	Chassis cover
7	B54888	1	Retractor assembly without catchplate
8	B54809	1	Outside hub
9	A55511	2	Chassis screw



**Figure 2.30** YD function exploded diagram

## YR FUNCTION CHASSIS—SPECIAL LOCK

Item	Part No.	Qty.	Description
1	A55685	1	Inside hub and locking pin assembly <i>or</i>
not shown	A56008	1	Inside hub assembly, lost motion
2	A55687	1	Keyed sleeve assembly <i>or</i>
not shown	A55725	1	Keyed sleeve assembly, non-IC
3	C55515	1	Spring drive plate
4	B55518	1	Lever return spring
5	B55504	1	Thrust plate
6	A55681	1	Key release cam assembly
7	B54172	1	Chassis cover
8	B54888	1	Retractor assembly without catchplate
9	B54809	1	Outside hub
10	A55511	2	Chassis screw

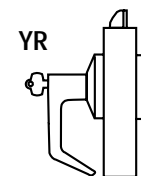
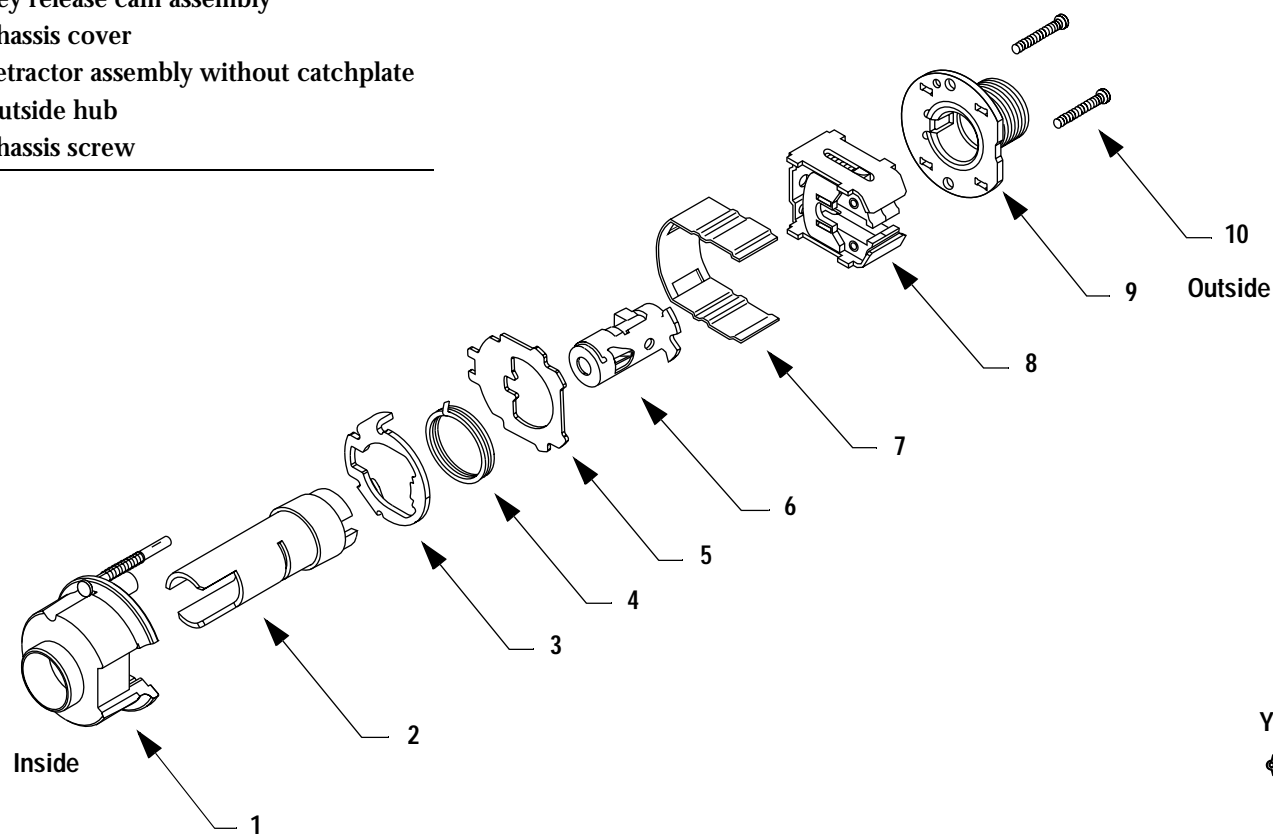


Figure 2.31 YR function exploded diagram

## Z FUNCTION CHASSIS—CLOSET LOCK

Item	Part No.	Qty.	Description
1	A54736	1	Turn blade assembly for Z function
2	A54810	1	Inside hub and side plate assembly
3	A54835	1	Non-keyed sleeve and driver assembly
4	B54172	1	Chassis cover
5	B54888	1	Retractor assembly without catchplate
6	B55504	1	Thrust plate
7	B55518	1	Lever return spring
8	A55610	1	Non-keyed sleeve and driver assembly
9	D55571	1	Outside hub
10	A55511	2	Chassis screw

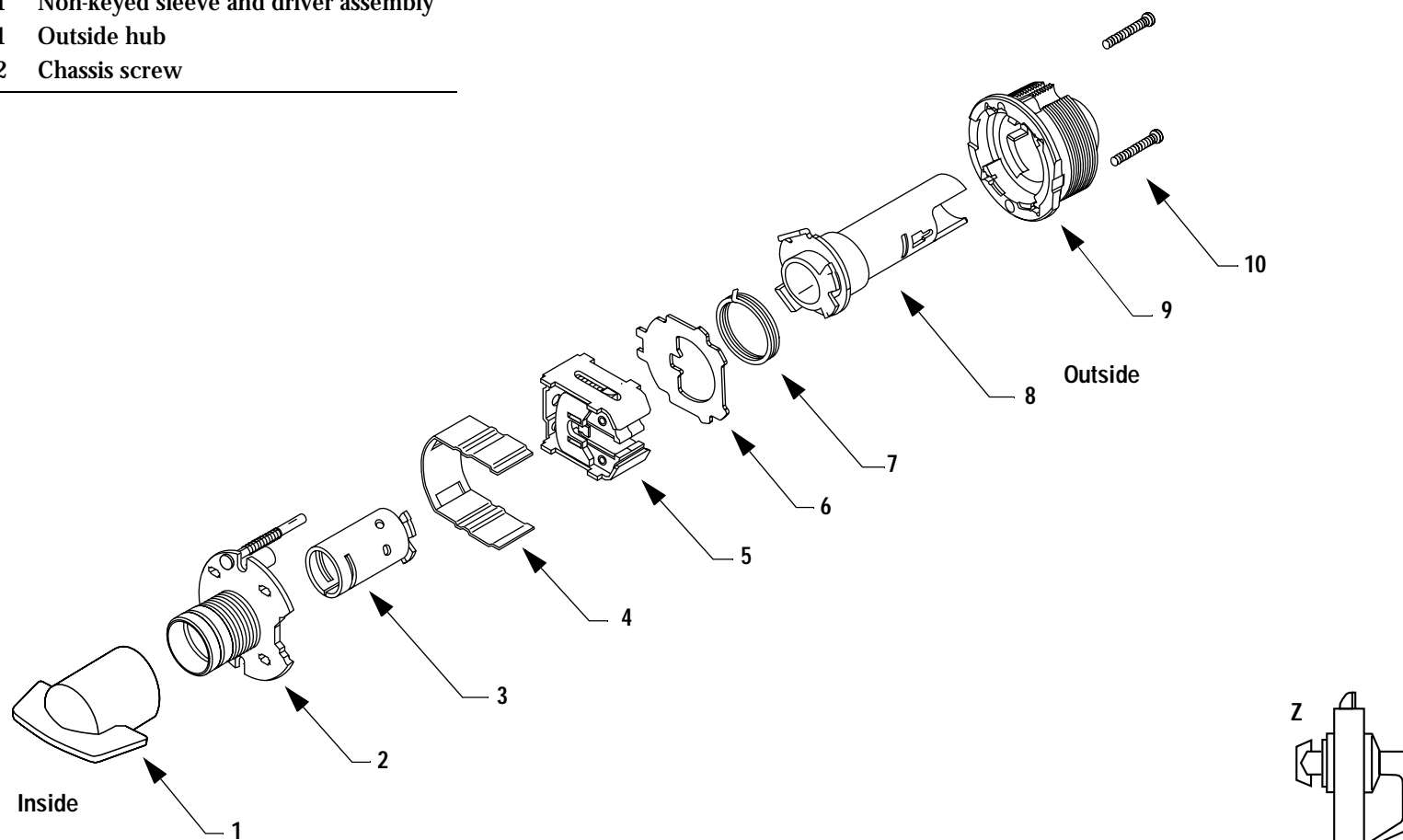


Figure 2.32 Z function exploded diagram

## FUNCTION CONVERSION

If you want to convert the function of an existing 9K Lock, use the following tables to determine the internal parts that you need. Unless otherwise noted, a quantity of one is used for each part.

## Standard functions

Part No.	Description	AB	C	D	E	G	H/HJ	L	N	NX	P	R	S	T	W	Y
B54745	Button release assembly							■								
B55690	Locking bar assembly for "NX" function									■						
B55692	Turn button assembly	■														
B55693	Push button assembly						■	■			■			■		
B55694	Slotted button assembly				■											
A55685	Inside hub and locking pin assembly	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
A56008	Inside hub assembly, lost motion <sup>a</sup>		■			■							■		■	
B54809	Outside hub & plate assembly															■
D55571	Outside hub	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
D56003	Outside hub, lost motion <sup>b</sup>	■	■	■	■	■	■	■		■	■	■	■	■	■	
B55610	Non-keyed sleeve and driver assembly	■		■	■		■	■	■	■	■	■		■		■
A55687	Keyed sleeve assembly	■	■	■	■	■ <sup>c</sup>	■		■	■	■	■	■ <sup>c</sup>	■	■ <sup>c</sup>	
A55700	Sleeve & key release cam assembly		■													
A55701	Keyed sleeve assembly for "M" function							■								
A55725	Non-IC keyed sleeve assembly <sup>d</sup>	■	■	■	■	■ <sup>c</sup>						■	■ <sup>c</sup>	■	■ <sup>c</sup>	
B56024	Non-IC sleeve & key release cam assembly <sup>e</sup>		■													
B54172	Chassis cover	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
B55504	Thrust plate (quantity 2)	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■ <sup>f</sup>
C55515	Spring drive plate	■	■ <sup>c</sup>	■	■	■ <sup>c</sup>	■	■		■	■	■	■ <sup>c</sup>	■	■ <sup>c</sup>	
A55518	Lever return spring (quantity 2)	■	■	■ <sup>f</sup>	■	■	■ <sup>f</sup>	■	■	■ <sup>f</sup>	■	■	■	■	■	■ <sup>f</sup>
B54886	Retractor assembly with long catchplate	■			■		■	■			■			■		
B54888	Retractor assembly without catchplate		■	■		■			■	■		■	■		■	■
A55673	Key release cam assembly	■	■		■			■								
A55675	Key release cam assembly			■											■ <sup>c</sup>	
A55676	Key release cam assembly					■ <sup>c</sup>										
A55677	Key release cam assembly						■									
A55680	Key release cam assembly									■	■					
A55681	Key release cam assembly											■	■ <sup>c</sup>	■		
A54190	Locking bar		■													
A54195	Locking bar					■										
A55505	Chassis screw (quantity 2)	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
A55511	Chassis screw (quantity 2)															■

- a. For the lost motion function, use in place of the inside hub assembly, A55685.  
b. For the lost motion function, use in place of the outside hub, D55571.  
c. Use a quantity of two (2).  
d. For the non-IC function, use in place of the keyed sleeve assembly, A55687.  
e. For the non-IC function, use in place of the sleeve & key release cam assembly, A55700.  
f. Use a quantity of one (1).



## Non-standard functions

Part No.	Description	A	B	DR	DZ	EA	IN	LL	M	O	RD	RZ	XD	XR	YD	YR	Z
A54736	Turn blade assembly for “Z” function				■							■					■
B55692	Turn button assembly	■								■							
B55693	Push button assembly		■					■									
B55694	Slotted button assembly					■											
A55695	Turn button assembly (quantity 2)								■								
A55699	Outside button assembly for “LL” function <sup>a</sup>							■									
B54810	Inside hub and side plate assembly				■							■					■
B55056	Inside hub, side plate, locking pin assembly			■													
A55685	Inside hub and locking pin assembly	■	■			■	■	■	■	■	■		■	■	■	■	
A56008	Inside hub assembly, lost motion <sup>b</sup>			■			■		■		■		■	■	■	■	
B54809	Outside hub & plate assembly														■	■	
D55571	Outside hub	■	■	■	■	■		■	■	■	■	■	■	■			■
D56003	Outside hub, lost motion <sup>c</sup>	■	■		■	■	■	■	■		■	■	■	■			
A54835	Non-keyed sleeve and driver assembly				■							■					■
B55610	Non-keyed sleeve and driver assembly	■	■			■		■	■	■							■
A55687	Keyed sleeve assembly	■	■	■ <sup>d</sup>	■	■	■ <sup>d</sup>			■	■ <sup>d</sup>	■	■ <sup>d</sup>	■ <sup>d</sup>	■ <sup>d</sup>	■	■
A55701	Keyed sleeve assembly for “M” function							■	■								
A55725	Non-IC keyed sleeve assembly <sup>e</sup>	■	■	■ <sup>d</sup>	■	■	■ <sup>d</sup>				■ <sup>d</sup>	■	■	■	■	■	
B54172	Chassis cover	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
A54195	Locking bar						■										
B55504	Thrust plate (quantity 2)	■	■	■	■ <sup>f</sup>	■	■	■	■	■	■	■ <sup>f</sup>	■	■	■ <sup>f</sup>	■ <sup>f</sup>	■ <sup>f</sup>
C55515	Spring drive plate	■	■	■ <sup>d</sup>	■	■	■ <sup>d</sup>	■	■	■	■ <sup>d</sup>	■	■ <sup>d</sup>	■ <sup>d</sup>	■	■	
B55518	Lever return spring (quantity 2)	■	■	■ <sup>f</sup>		■	■	■	■	■	■ <sup>f</sup>	■ <sup>f</sup>		■ <sup>f</sup>		■ <sup>f</sup>	■ <sup>f</sup>
A55540	Bridge bar								■								
B54886	Retractor assembly with long catchplate							■									
B54887	Retractor assembly with short catchplate		■			■											
B54888	Retractor assembly without catchplate	■		■	■		■		■	■	■	■	■	■	■	■	■
A55213	Key release cam assembly														■		
A55673	Key release cam assembly	■	■			■		■									
A55675	Key release cam assembly			■	■						■		■				
A55676	Key release cam assembly						■										
A55678	Key release cam assembly (quantity 2)								■								
A55680	Key release cam assembly									■							
A55681	Key release cam assembly			■							■	■		■		■	
A55682	Key release cam assembly												■	■			
A56038	Key release cam assembly						■										
A55505	Chassis screw (quantity 2)	■	■	■		■	■	■	■	■	■		■	■			
A55511	Chassis screw (quantity 2)				■							■			■	■	■

a. One (1) six pin throw member, B54210, is also required.

b. For the lost motion function, use in place of the inside hub assembly B55056 or A55685.

c. For the lost motion function, use in place of the outside hub, D55571.

d. Use a quantity of two (2).

e. For the non-IC function, use in place of the keyed sleeve and driver assembly, A55687.

f. Use a quantity of one (1).

TRIM PARTS

Standard strikes  
and strike boxes

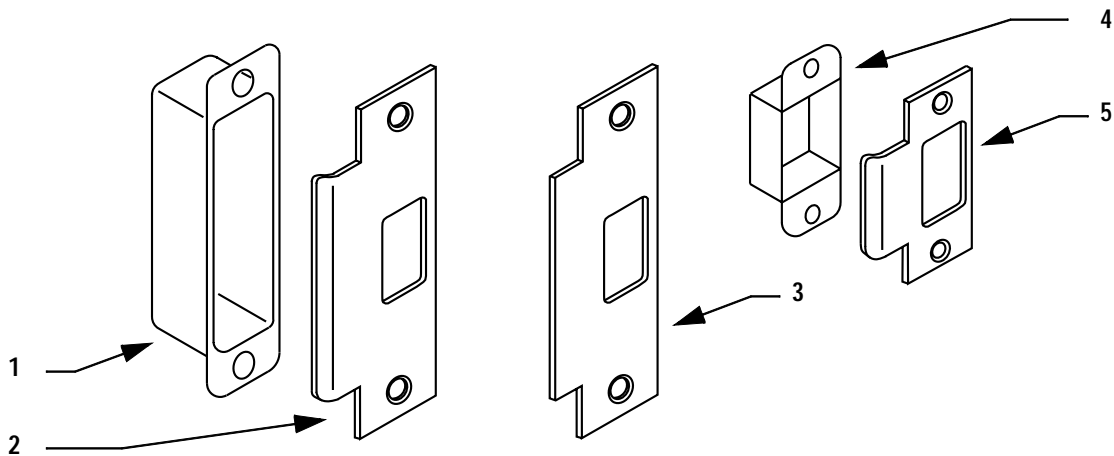


Figure 2.33 Standard strikes and strike boxes

Standard strikes and strike boxes parts list

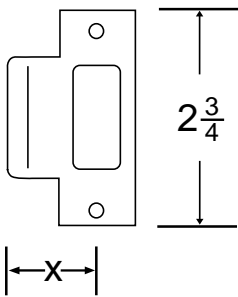
Item	Nomen- clature	Part no.	Description
1	30HS4	B34380	ANSI Plastic strike box
2	8KS3 <sup>a</sup>	B25641	ANSI Strike
3	83KS3	C63016	ANSI 7/8" flat lip strike
4	8KS1	B25460	Standard steel strike box
5	8KS2 <sup>b</sup>	B25639	Standard strike

- a. Two (2) A25359 latch screws and two (2) A18724 strike screws are included with the 8KS3 strike. The 30HS4 ANSI Strike box is not included.
- b. Four (4) A25359 screws are included with the 8KS2 strike—two (2) for the latch and two (2) for the strike.

Non-standard  
strikes

Non-standard strikes parts list

Part no.	Description
B54063	7/8" flat lip strike
B54064	1 " lip strike
B54065	1 1/8" lip strike
B54066	1 1/2" lip strike
B54067	1 3/4" lip strike
B54068	2" lip strike
B54069	2 1/4" lip strike
B54070	2 1/2" lip strike
B54071	3" lip strike
B54072	4" lip strike



The measurement is taken from the edge of the lip to the center of the screw holes.

Figure 2.34 Understanding strike lip measurement

# Roses, rose liners, and rose spacers

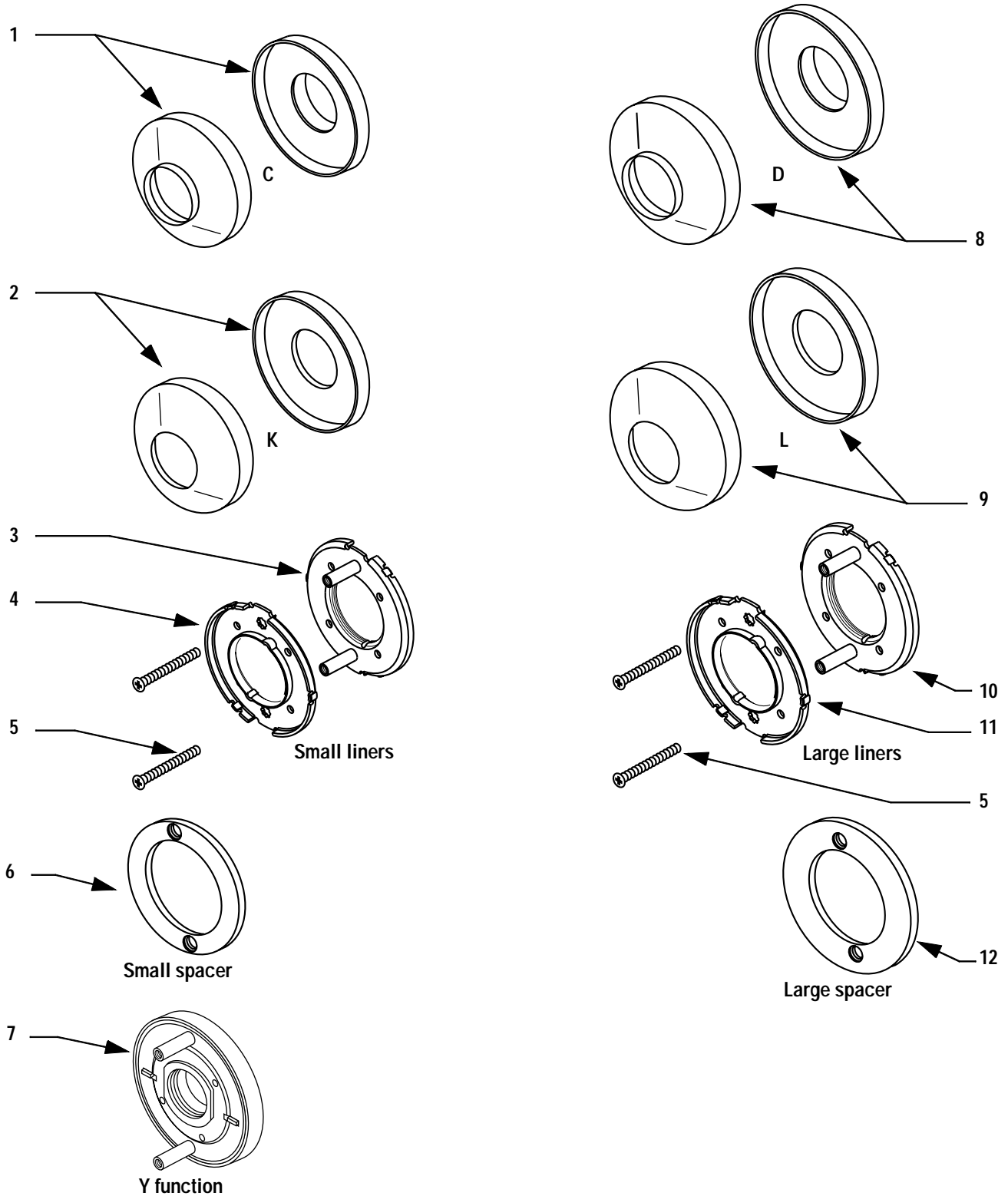


Figure 2.35 Roses, rose liners, and rose spacers

### Roses, rose liners, and rose spacers parts list

Item	For rose	Part no.	Qty.	Description
1	C	B55015	2	Small rose trim
2	K	B55018	2	Small rose trim
3	C & K	B55603	1	Small outside rose liner
4	C & K	C55556	1	Small inside rose liner
1 & 3	C	B55605	1	Small outside rose and liner assembly
2 & 3	K	B55604	1	Small outside rose and liner assembly
5	C, D, K, L	B55557	2	Through-bolt screws
6	C & K	B55043	2	Small rose spacer
7		A55711	1	Y function rose assembly
8	D	B55007	2	Large rose trim
9	L	B55017	2	Large rose trim
10	D & L	B55602	1	Large outside rose liner
11	D & L	C55555	1	Large inside rose liner
8 & 10	D	B55601	1	Large outside rose and liner assembly
9 & 10	L	B55600	1	Large outside rose and liner assembly
12	D & L	B55044	2	Large rose spacer

## Standard levers and components

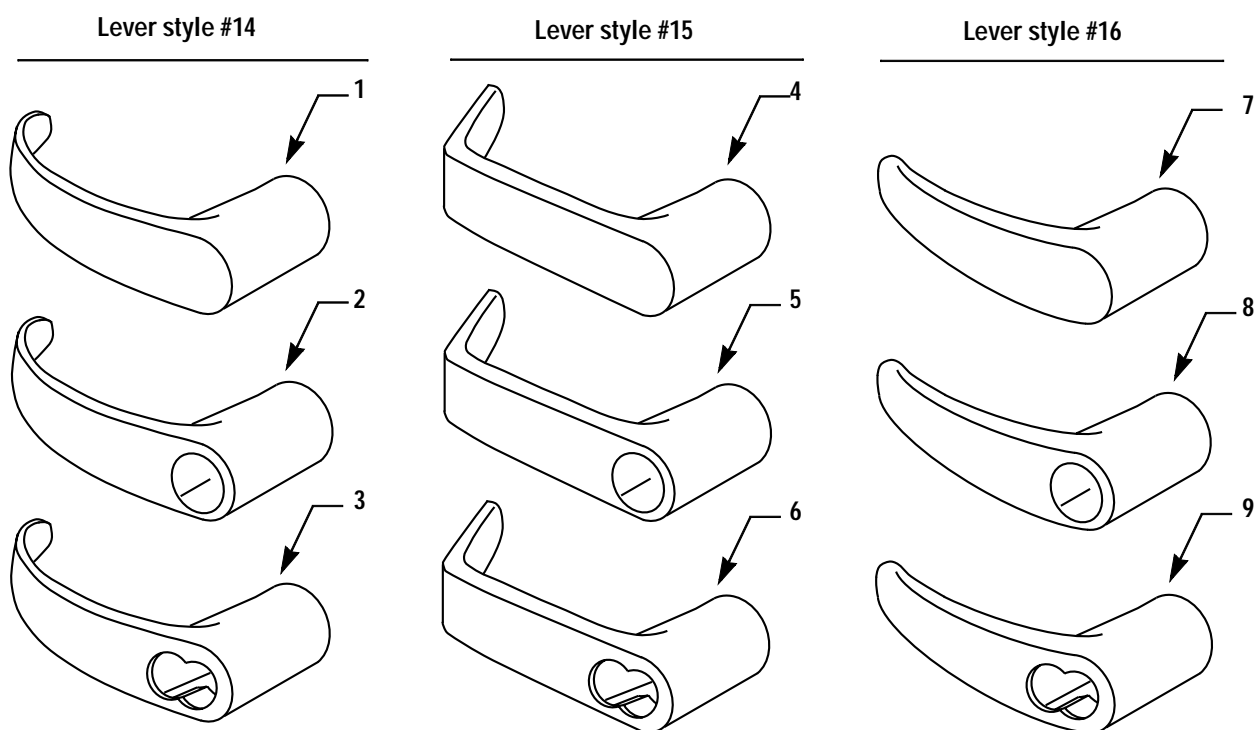


Figure 2.36 Standard levers

### Standard levers parts list

Item	Style	Part no.	Description
1	14	E55022	Plain lever handle
2	14	E55021	Button lever handle
3	14	E55020	Keyed lever handle
not shown		B55100	Keyed lever handle for H functions
4	15	B55169	Plain lever handle
5	15	B55170	Button lever handle
6	15	B55168	Keyed lever handle
not shown		B55177	Keyed lever handle for H functions
7	16	E55025	Plain lever handle
8	16	E55024	Button lever handle
9	16	E55023	Keyed lever handle
not shown		B55110	Keyed lever handle for H functions

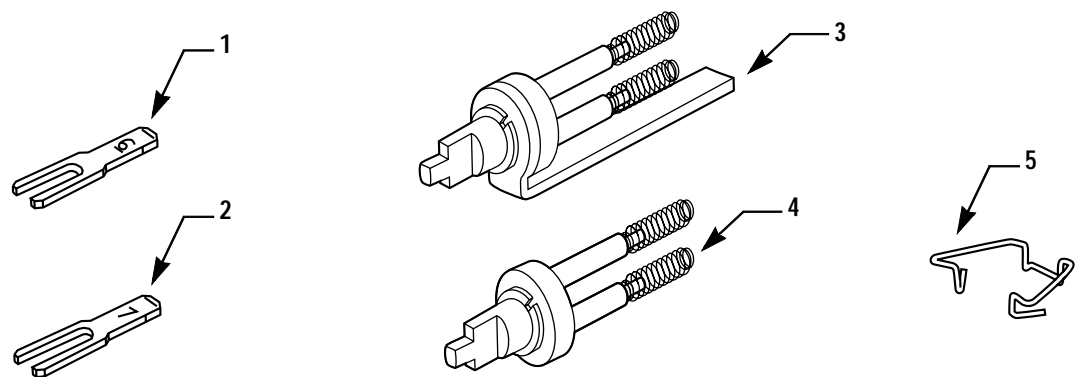


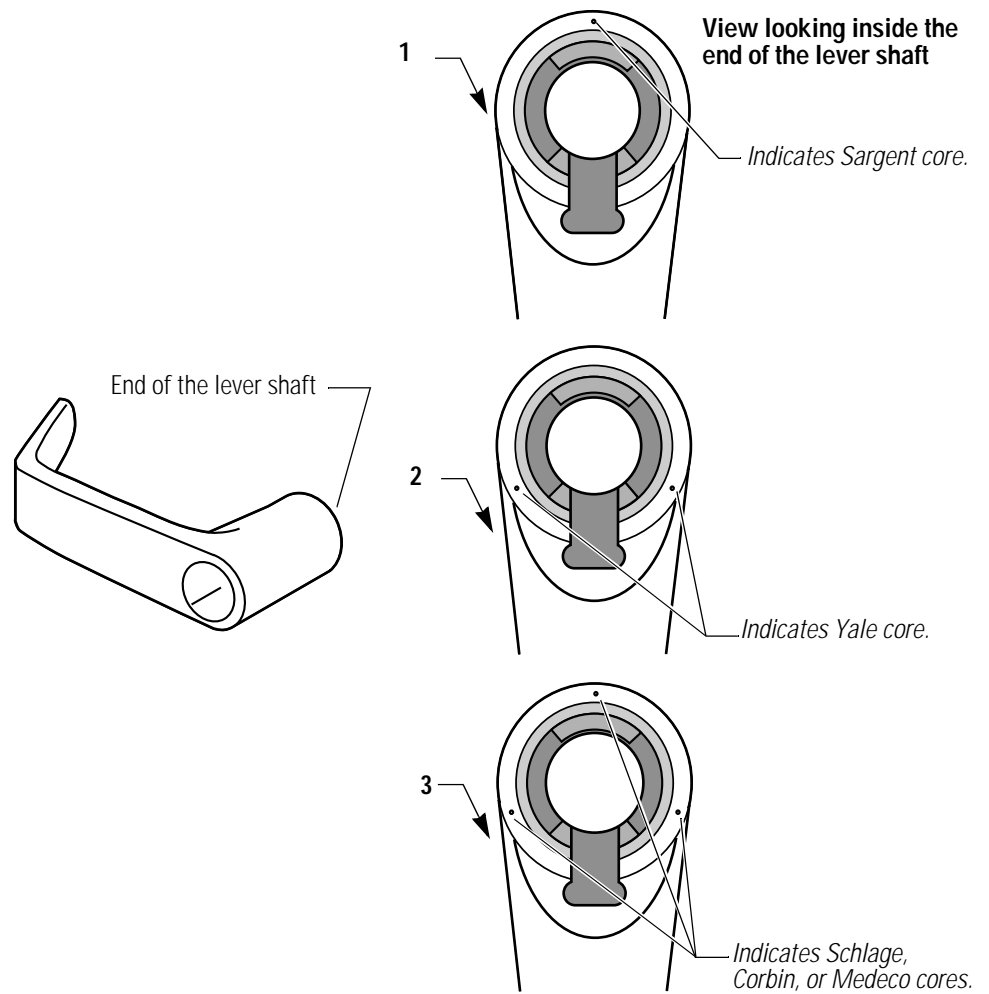
Figure 2.37 Standard lever components

Standard lever components parts list

Item	Part no.	Qty.	Description
1	B54210	1 <sup>a</sup>	Six pin throw member <sup>b</sup>
2	B54200	1 <sup>a</sup>	Seven pin throw member <sup>b</sup>
3	A55697	1	“H” throw member
4	A55696	1	“HJ” throw member
5	B54182	1	Lever keeper spring

- a. Single-keyed locks require one (1); double-keyed locks require two (2).
- b. For information about cores and keys, see the *Core and Key Service Manual*.

## Non-IC levers and components



**Figure 2.38** Non-IC levers

### Non-IC levers parts list

Item	Style	Part no.	Description
1	15	E55721	Non-IC lever for Sargent core
2	15	E55722	Non-IC lever for Yale core
3	15	E55723	Non-IC lever for Schlage/Corbin/Medeco cores

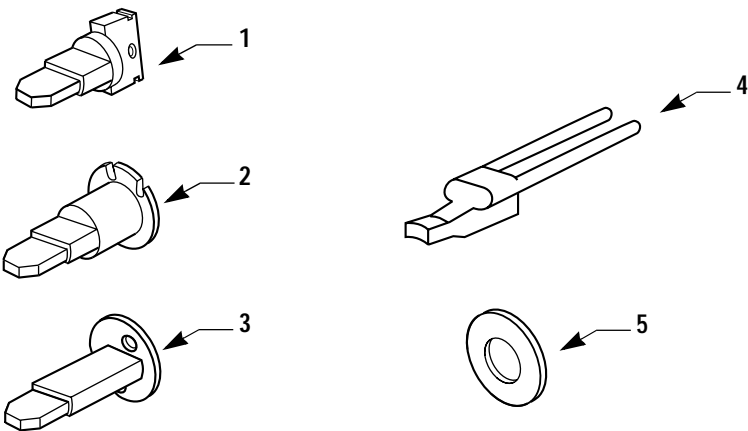


Figure 2.39 Non-IC lever components

Non-IC lever components parts list

Item	Part no.	Qty.	Description
1	B55709 <sup>a</sup>	1 <sup>b</sup>	Non-IC throw member for Sargent and Yale cores <sup>c</sup>
2	A55708 <sup>d</sup>	1 <sup>b</sup>	Non-IC throw member for Schlage and Corbin cores <sup>c</sup>
3	A55712 <sup>e</sup>	1 <sup>b</sup>	Non-IC throw member for Medeco core <sup>c</sup>
4	C55714	1 <sup>b</sup>	Non-IC lever handle insert
5	A55713	1 <sup>b</sup>	Non-IC throw member support ring

- a. To order the kit that contains the non-IC throw member, insert, and support ring for Sargent cores, use number 177-0600; for Yale cores, use number 177-0642.
- b. Single-keyed locks require one (1); double-keyed locks require two (2).
- c. For information about cores and keys, see the *Core and Key Service Manual*.
- d. To order the kit for Schlage cores, use number 177-0527; for Corbin cores, use number 177-0529.
- e. To order the kit for Medeco cores, use number 177-8196.



Dummy trim

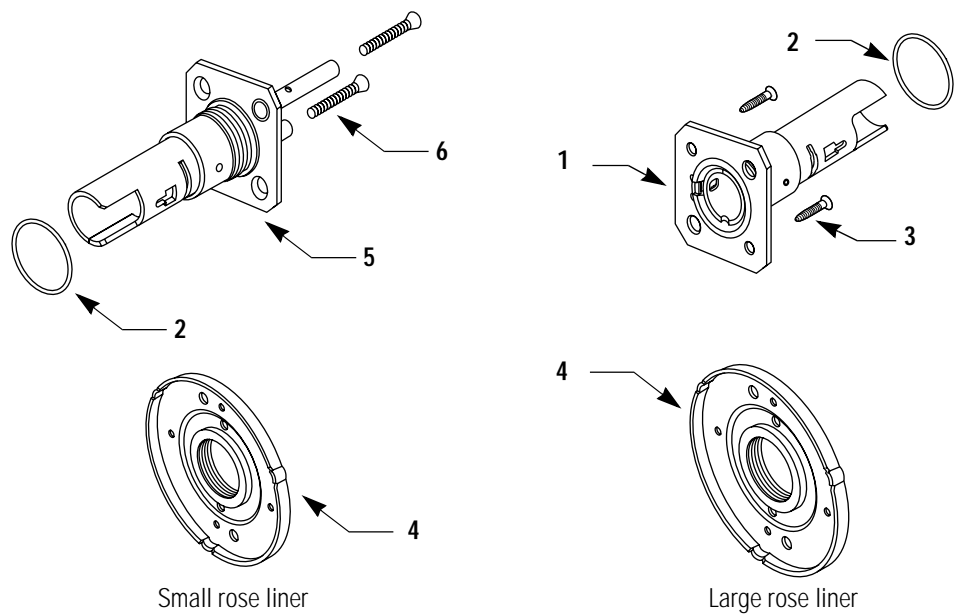
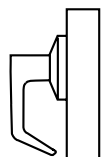


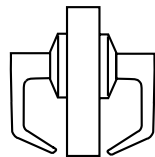
Figure 2.40 Dummy trim parts

Single dummy trim parts list



Item	Part No.	Qty.	Description
1	B55067	1	Chassis sub-assembly
2	A54465	1	“O” ring
3	A39217	2	#8 x 1 PFH type AB screw
4	B55051	1	Small liner and ring assembly <i>or</i>
	B55050	1	Large liner and ring assembly

Double dummy trim parts list



Item	Part No.	Qty.	Description
1	B55239	1	Chassis sub-assembly
2	A54465	2	“O” ring
4	B55051	2	Small liner and ring assembly <i>or</i>
	B55050	2	Large liner and ring assembly
5	B55067	1	Chassis sub-assembly
6	A18991	2	#8-32 x 1 1/8 Phil. FHMS screw

Latches

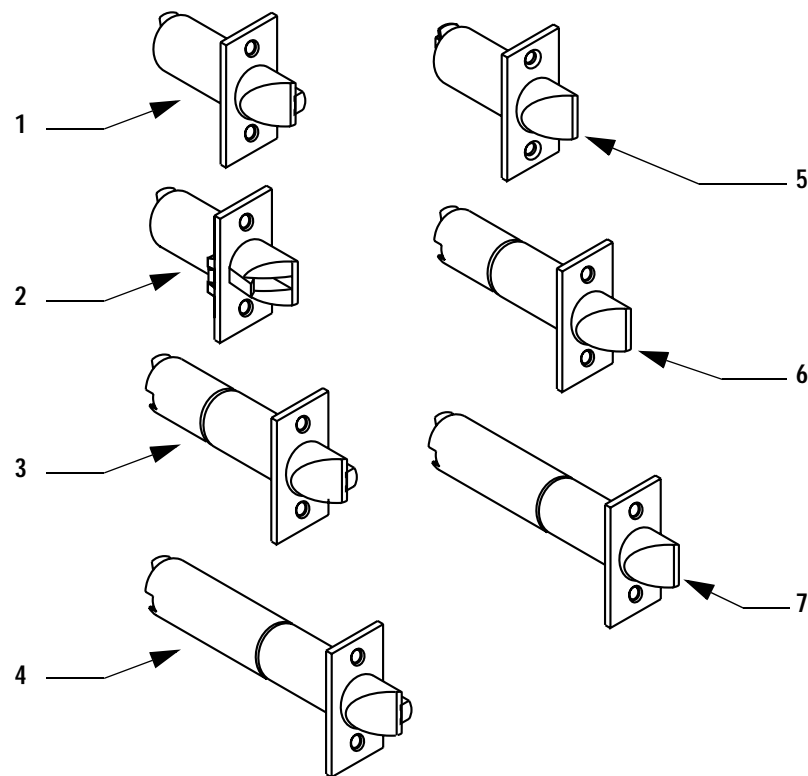


Figure 2.41 Latches

Latches parts list

Item	Latch type	Backset	Part no.	Nomen- clature	Description
1	Deadlocking	2 3/4"	C54680	8KL3	Latch
2	Deadlocking	2 3/4"	A54661		Latch with 3/4" throw
3	Deadlocking	3 3/4"	C54682	8KL4	Latch
4	Deadlocking	5"	C54684	8KL5	Latch
5	Spring	2 3/4"	C54681	8KSL3	Latch
6	Spring	3 3/4"	C54683	8KSL4	Latch
7	Spring	5"	C54685	8KSL5	Latch

Installation tools

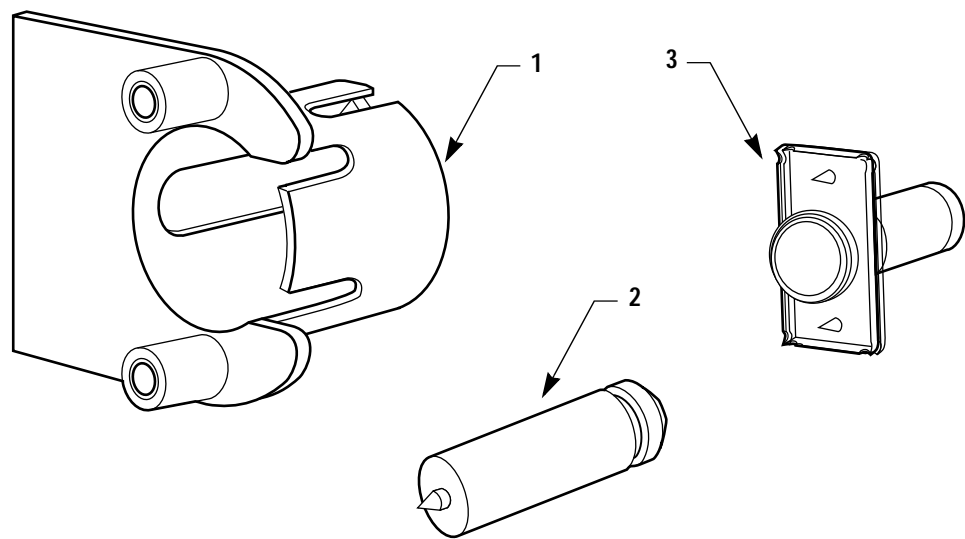


Figure 2.42 Installation tools

Installation tools parts list

Item	Nomen- clature	Part no.	Description
1	KD303	C55034	Drill jig
2	KD325	A01514	Strike plate locating pin
3	KD315	1350393	Faceplate marking chisel

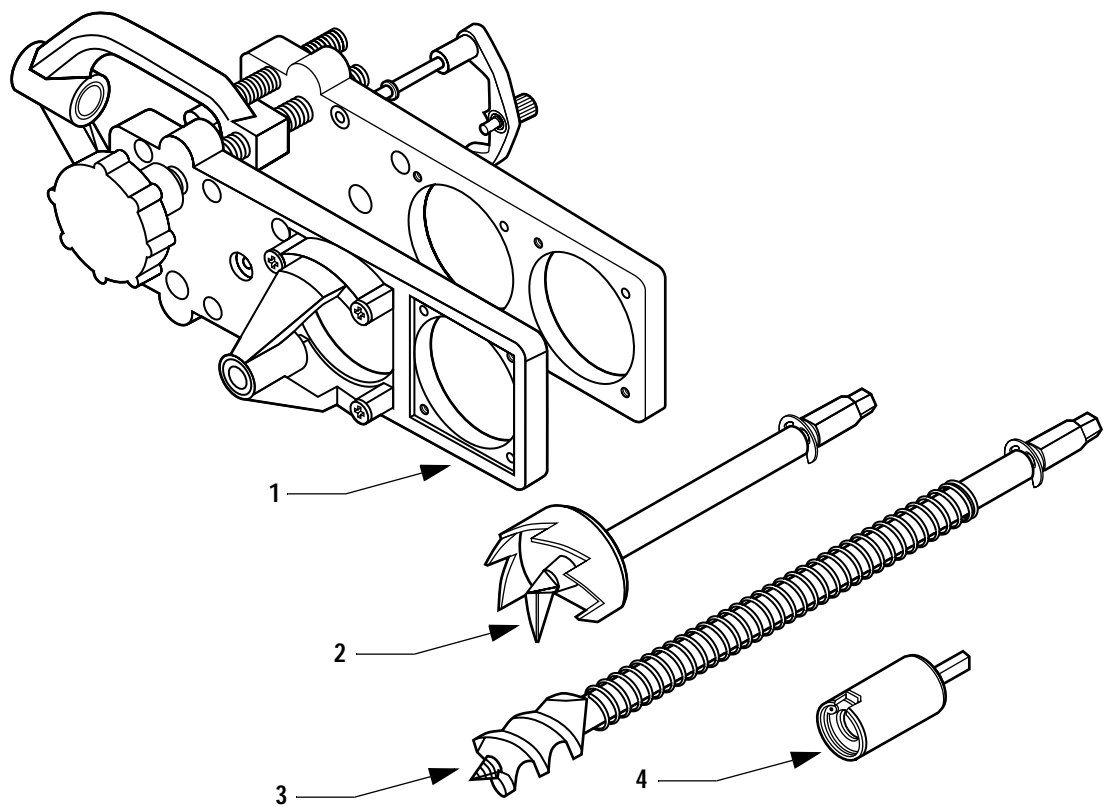


Figure 2.43 Boring jig kit

Boring jig kit parts list

Item	Nomen- clature	Part no.	Description
1	KD304	B54083	Boring jig <sup>a</sup>
2	KD309	A54084	2 1/8" diameter chassis hole bit assembly
3	KD318	A54085	1" diameter drill bit assembly
4	KD319	A54086	Adaptor for 3/8" drill chuck

a. To order the boring jig kit, use part number B54082 or nomenclature KD304A.

# 3

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## SERVICE AND MAINTENANCE

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This chapter contains instructions for removing and replacing components, servicing and maintaining components, and troubleshooting common questions.

To	See page
Replace levers	<a href="#">3-3</a>
Replace roses	<a href="#">3-4</a>
Replace button assemblies	<a href="#">3-7</a>
Replace the lever keeper spring	<a href="#">3-9</a>
Replace the lever return spring	<a href="#">3-10</a>
Replace the key release cam assembly	<a href="#">3-14</a>
Replace the spring drive plate	<a href="#">3-15</a>
Replace the sleeve assembly	<a href="#">3-16</a>
Lubricate cores	<a href="#">3-18</a>
Align chassis and trim	<a href="#">3-19</a>
Position the locking cam for C function locks	<a href="#">3-20</a>
Position the locking cam for G and IN function locks	<a href="#">3-21</a>
Use the emergency key for H and HJ function locks	<a href="#">3-22</a>
Troubleshoot common questions	<a href="#">3-23</a>

MAINTENANCE TOOLS

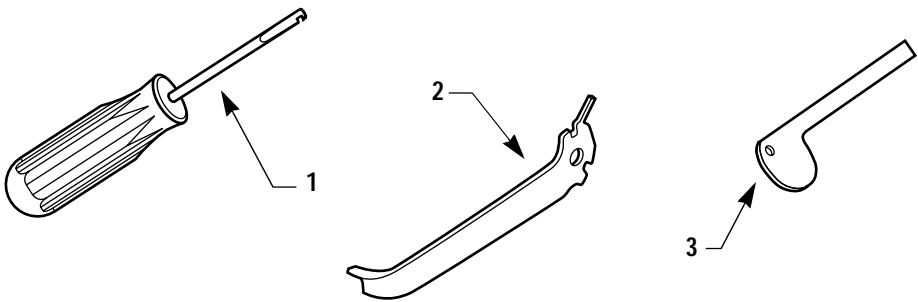


Figure 3.1 Maintenance tools

Maintenance tools parts list

Item	Nomen-clature	Part no.	Description
1	KD340		Spring loading tool
2	KD317	C55506	Spanner wrench
3		A25586	Emergency driver <sup>a</sup>

a. For use with hotel function locks (H and HJ).

## REPLACING PARTS

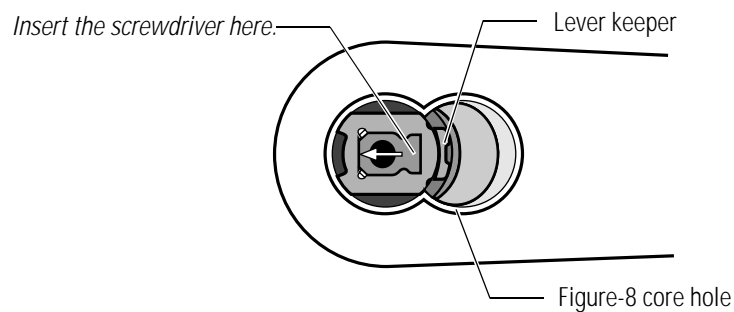
### Replacing the lever

#### To remove the keyed lever:

1. Insert the control key into the core and rotate the key 15 degrees to the right.
2. Remove the core and throw member from the lever.
3. Insert a flat blade screwdriver into the figure-8 core hole and into the lever keeper.
4. Press the screwdriver blade in the direction of the arrow in [Figure 3.2](#).

**Note:** You will not be able to remove the lever if the screwdriver blade is inserted too far past the keeper.

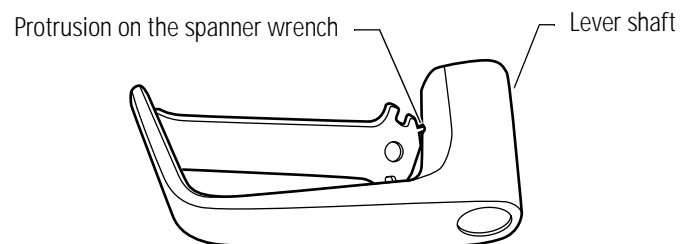
5. Slide the lever off of the sleeve.



**Figure 3.2** Removing the keyed lever

#### To remove the plain lever or button lever:

1. Insert the protrusion on the spanner wrench into the hole on the shaft of the lever, as shown in [Figure 3.3](#). Slide the lever off the sleeve.

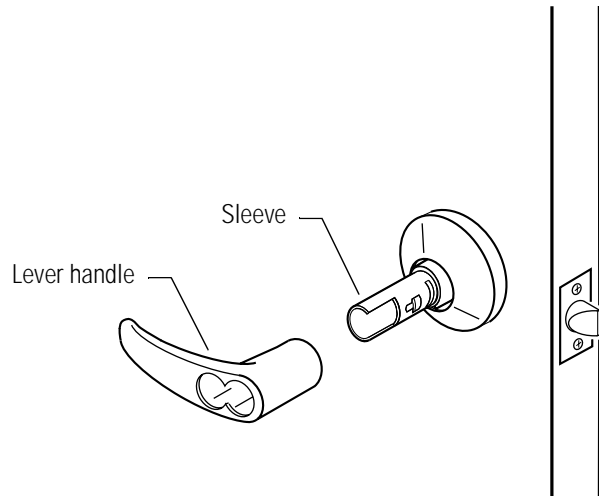


**Figure 3.3** Removing the plain lever or button lever

#### To replace the lever:

1. Position the lever so that the handle points toward the door hinges.
2. Slide the lever onto the sleeve and firmly push on the lever until it is seated.

3. Turn the levers to check that they operate smoothly.



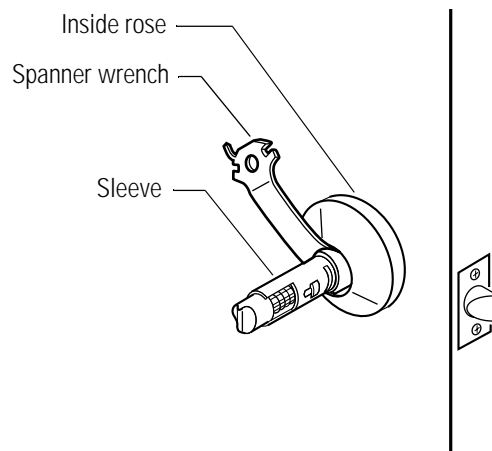
**Figure 3.4** Replacing the lever (keyed lever shown)

4. If the lever is keyed, insert the control key into the core and rotate the key 15 degrees to the right. Using the control key, insert the core and throw member into the lever. Rotate the control key 15 degrees to the left and remove the key.

#### Replacing the inside rose and rose liner

To remove the inside rose and rose liner:

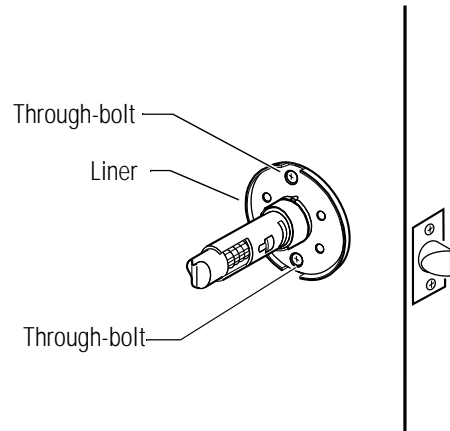
1. Remove the inside lever ([page 3-3](#)).
2. Insert the solid, curved end of the spanner wrench in between the rose and the sleeve, as shown in [Figure 3.5](#). Pry the rose until it pops off of the liner.



**Figure 3.5** Removing the inside rose with the spanner wrench



3. Unscrew the two through-bolts, as shown in [Figure 3.6](#). Save the through-bolts.

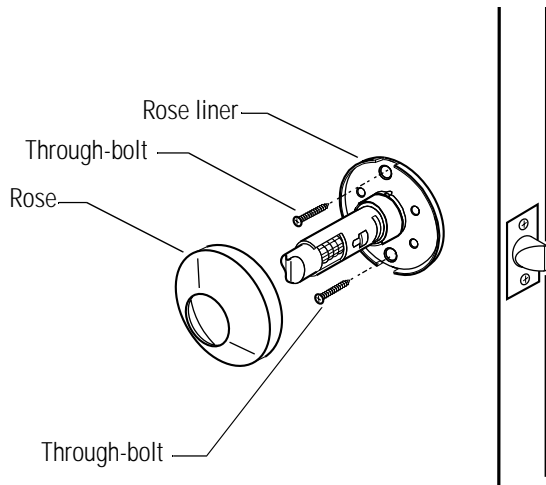


**Figure 3.6** Removing the two through-bolts

4. Slide the liner off of the sleeve.

**To replace the inside rose and rose liner:**

1. Align the holes in the liner with the holes prepared in the door.
2. Install the two through-bolts through the liner and door in the top and bottom holes.
3. Tighten the liner onto the door with the through-bolts.
4. Replace the lever. See [page 3-3](#)



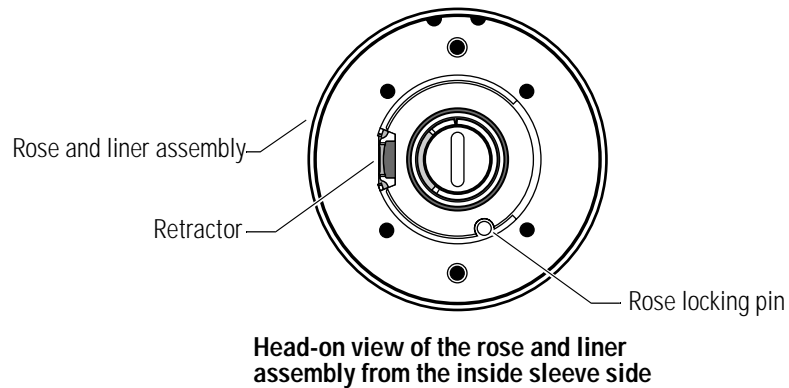
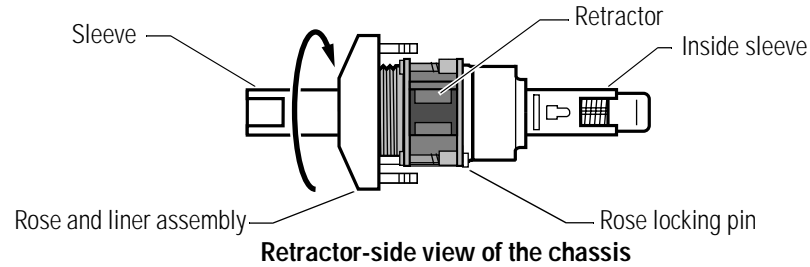
**Figure 3.7** Replacing the inside rose and rose liner

**Replacing the  
outside rose  
and liner  
assembly**

**To remove the outside rose and liner assembly:**

1. Remove the following components:
  - levers ([page 3-3](#))
  - inside rose and rose liner ([page 3-4](#)).

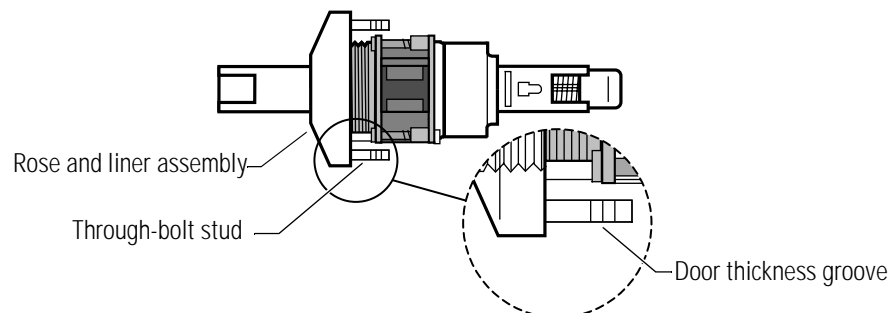
2. Slide the chassis assembly out of the door.
3. Retract the rose locking pin, and rotate the rose and liner assembly counterclockwise until it is free from the hub.
4. Remove the rose and liner assembly from the sleeve.



**Figure 3.8** Removing the outside rose and liner assembly

**To replace the outside rose and liner assembly:**

1. Retract the rose locking pin, and rotate the rose and liner assembly clockwise until the proper door thickness groove on the through-bolt stud lines up with the hub face.



**Figure 3.9** Replacing the outside rose and liner assembly

2. Release the rose locking pin. It should lock into the rose liner.

3. Install the lock chassis assembly from the outside. Make sure the latch tabs engage the chassis frame and the latch tailpiece engages the retractor.
4. Replace the following components:
  - inside rose and rose liner (page 3-5)
  - levers (page 3-3).

### Replacing the button assembly

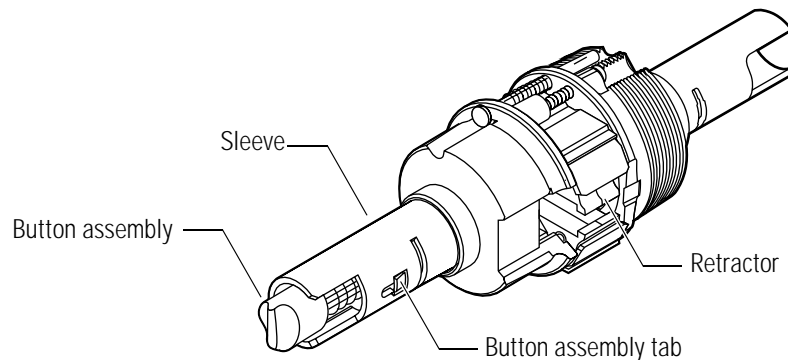
To remove the button assembly:

Note: These instructions apply for all types of button assemblies.

1. Remove the following components:
  - levers (page 3-3)
  - roses and rose liners (page 3-4 or page 3-5).
2. Use a flat screwdriver to press down on the button assembly tab, which is visible through the cutout in the sleeve. The tab should now lie flat.

Note: When performing this step, it is best to position the lock on a flat surface so that the retractor faces upward.

3. Press down on the retractor and slide the button assembly out of the sleeve.

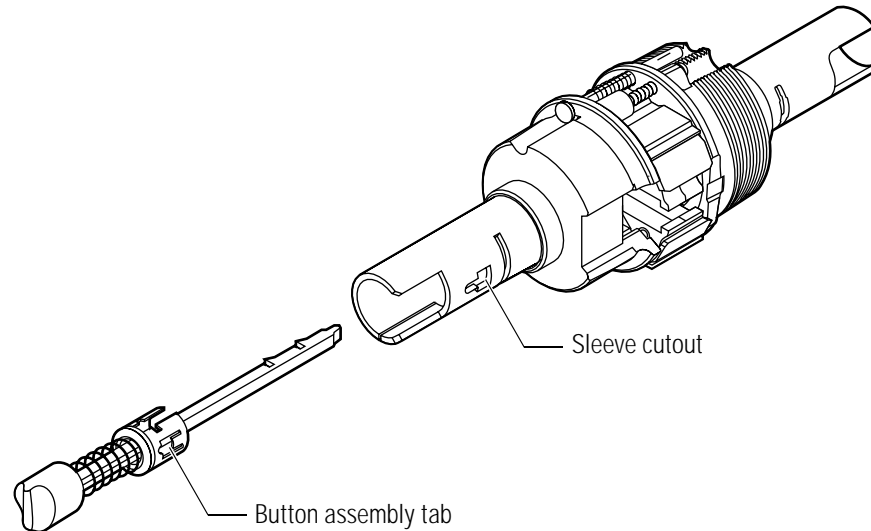


**Figure 3.10** Removing the button assembly

**To replace the button assembly:**

1. Insert the new button assembly into the sleeve, as shown in [Figure 3.11](#), until the tab lines up with the cutout in the sleeve. It may be necessary to slightly press in the retractor with your thumb so that the locking bar can properly align itself through the chassis and into the key release cam assembly.

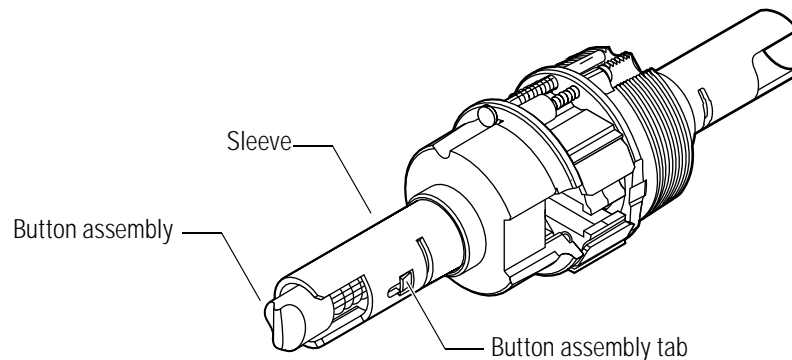
**Note:** The button assembly should not pop out of the sleeve. If it does, it is misaligned and will not function properly.



**Figure 3.11** Inserting the button assembly into the sleeve

2. Insert a small screwdriver into the cutout in the sleeve and under the button assembly tab. Bend the tab into the cutout, as shown in [Figure 3.12](#).

**Note:** Do not bend the tab so that it protrudes further than the diameter of the sleeve. It could interfere with the lever function.



**Figure 3.12** Bending the button assembly tab

3. Replace the following components:

- roses and rose liners ([page 3-4](#) or [page 3-5](#))
- levers ([page 3-3](#)).

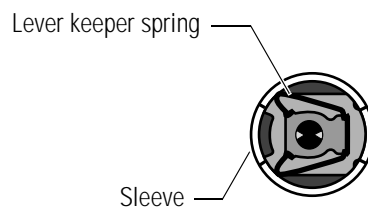
**Replacing the  
lever keeper  
spring**

**To remove the lever keeper spring:**

1. Remove the following components:

- levers ([page 3-3](#))
- roses and rose liners ([page 3-4](#) and [page 3-5](#))
- button assembly, if present ([page 3-7](#)).

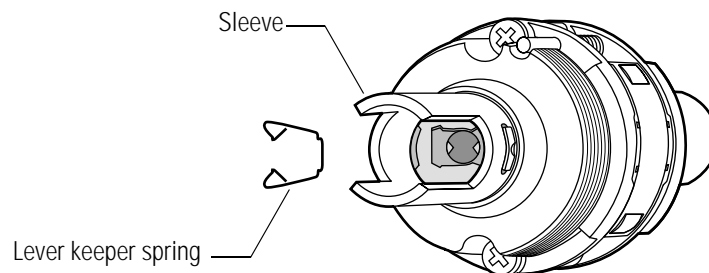
2. Using a pair of needle-nosed pliers, reach into the sleeve and remove the lever keeper spring, as shown in [Figure 3.13](#).



**Figure 3.13** Removing the lever keeper spring

**To replace the lever keeper spring:**

1. Position the lever keeper spring as shown in [Figure 3.14](#).



**Figure 3.14** Positioning the lever keeper spring

2. Use a pair of needle-nosed pliers to insert the lever keeper spring into the sleeve. Using the pliers, work the spring into position so that the spring is gripping the lever keeper. See [Figure 3.15](#).

Note: If the lever keeper spring is not installed correctly, the lever may fall off of the chassis.

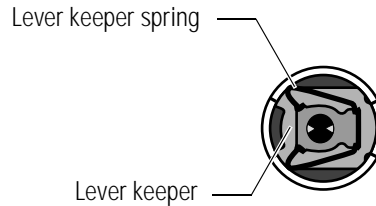


Figure 3.15 Lever keeper spring in position

3. Replace the following components:
  - button assembly, if present ([page 3-8](#))
  - roses and rose liners ([page 3-5](#) and [page 3-6](#))
  - levers ([page 3-3](#)).

#### Replacing the lever return spring



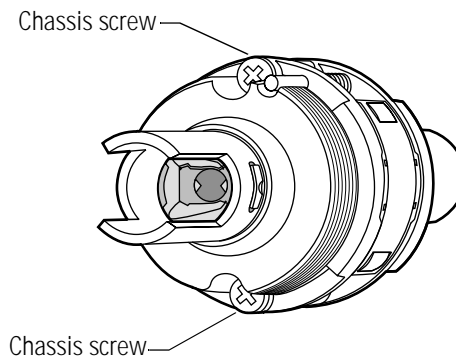
Caution

#### To remove the lever return spring:

*Use extreme caution when performing the steps below. Point the lever return spring away from you while disassembling the lock. The lever return spring may unexpectedly pop out and could injure you.*

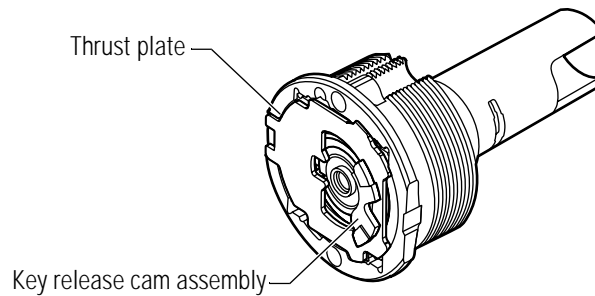
1. Remove the following components:
  - levers ([page 3-3](#))
  - roses and rose liners ([page 3-4](#) and [page 3-5](#))
  - button assembly, if present ([page 3-7](#)).

2. Remove the two chassis screws shown in [Figure 3.16](#), and separate the hub and sleeve assembly from the rest of the chassis. Save the two screws.



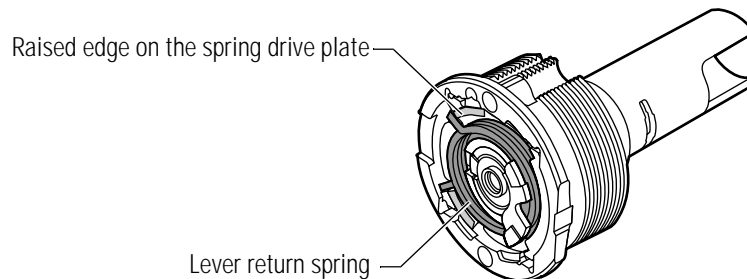
**Figure 3.16** Separating the hub and sleeve assembly from the chassis

3. Raise the key release cam assembly or non-keyed sleeve assembly slightly, and slide the thrust plate out from under it. See [Figure 3.17](#).



**Figure 3.17** Removing the thrust plate

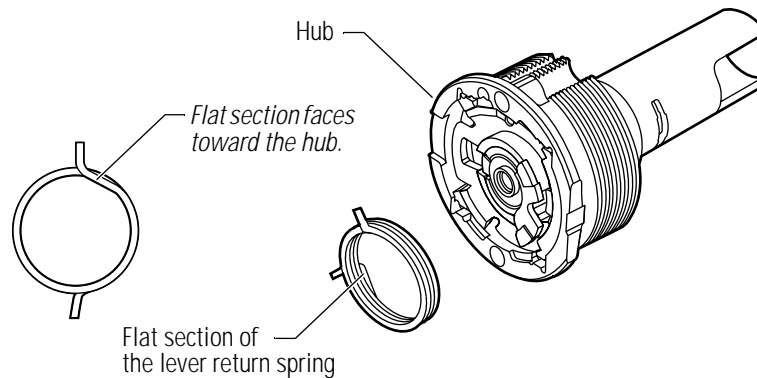
4. Pull the end of the lever return spring up and over the raised edge on the spring drive plate or non-keyed sleeve. See [Figure 3.18](#).



**Figure 3.18** Removing the lever return spring

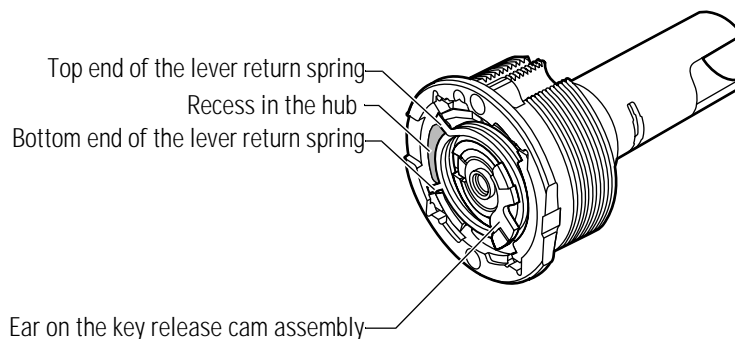
**To replace the lever return spring:**

1. Position the lever return spring so that the flat section of the spring faces toward the hub, as shown in [Figure 3.19](#).



**Figure 3.19** Positioning the lever return spring

2. Raise the key release cam assembly or non-keyed sleeve assembly slightly, and insert the lever return spring so it fits under the ears on the key release cam assembly or non-keyed sleeve assembly. The bottom end of the lever return spring should line up with the edge of the recess in the hub, as shown in [Figure 3.20](#).



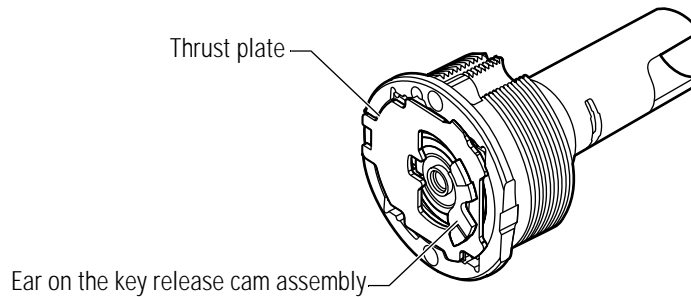
**Figure 3.20** Inserting the lever return spring

3. Use the KD340 spring loading tool or a pair of needle-nosed pliers to pull the top end of the lever return spring around to rest against the other edge of the recess in the hub, as shown in [Figure 3.20](#).

**Note:** Make sure that the lever return spring does not separate and ride onto the top of the sleeve.

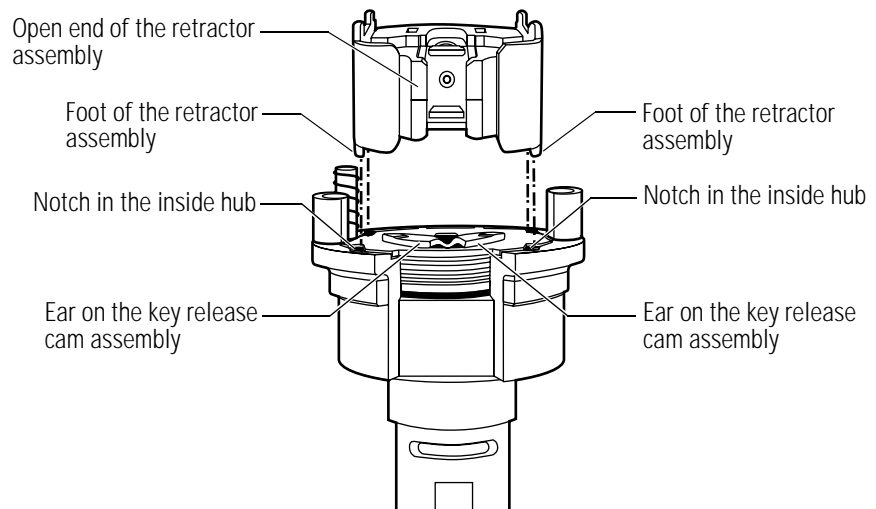


4. Raise the key release cam assembly or non-keyed sleeve assembly slightly, and insert the flat end of the thrust plate under the ears, as shown in [Figure 3.21](#). The plate should be flush with the top of the hub.



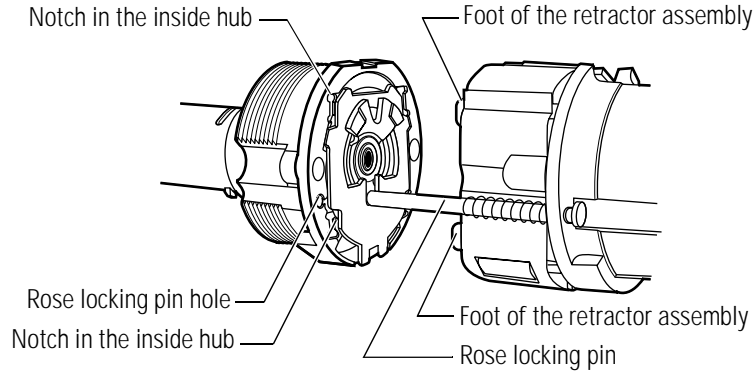
**Figure 3.21** Installing the thrust plate

5. Slide the chassis cover over the retractor assembly.
6. Align the open end of the retractor assembly with the ears on the key release cam assembly or non-keyed sleeve assembly in the inside hub assembly.
7. Press the retractor toward the retractor springs and insert the feet of the retractor assembly into the notches in the inside hub, as shown in [Figure 3.22](#).



**Figure 3.22** Positioning the retractor assembly

8. Align the feet of the retractor assembly with the notches in the outside hub assembly, and the rose locking pin with the smaller of the two holes on the outside assembly, as shown in [Figure 3.23](#). Press the retractor toward the retractor springs and slide the two sections together.



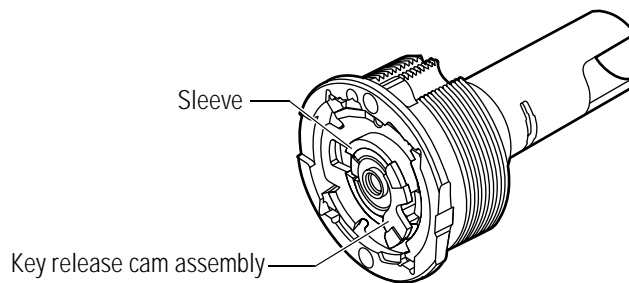
**Figure 3.23** Installing the retractor assembly

9. Install the two chassis screws.
10. Replace the following components:
  - button assembly, if present ([page 3-8](#))
  - roses and rose liners ([page 3-5](#) and [page 3-6](#))
  - levers ([page 3-3](#)).

#### Replacing the key release cam assembly

To remove the key release cam assembly:

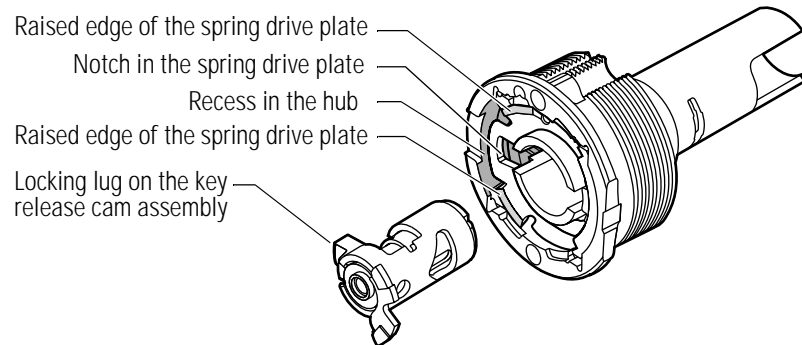
1. Remove the following components:
  - levers ([page 3-3](#))
  - roses and rose liners ([page 3-4](#) and [page 3-5](#))
  - button assembly, if present ([page 3-7](#))
  - lever return spring ([page 3-10](#)).
2. Pull the key release cam assembly out of the sleeve.



**Figure 3.24** Removing the key release cam assembly

### To replace the key release cam assembly:

1. Insert the key release cam assembly into the sleeve so that the locking lug fits into the notch in the sleeve and spring drive plate. See [Figure 3.25](#).



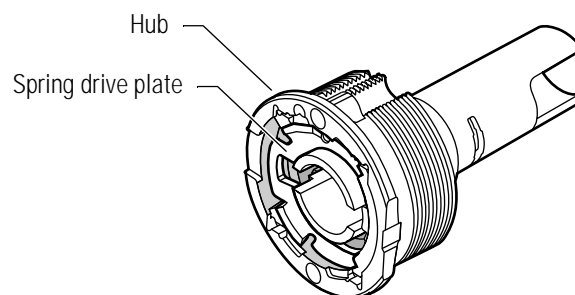
**Figure 3.25** Installing the key release cam assembly

2. Make sure that the raised edges of the spring drive plate line up with the recess in the hub, as shown in [Figure 3.25](#).
3. Replace the following components:
  - lever return spring ([page 3-12](#))
  - button assembly, if present ([page 3-8](#))
  - roses and rose liners ([page 3-5](#) and [page 3-6](#))
  - levers ([page 3-3](#)).

### Replacing the spring drive plate

#### To remove the spring drive plate:

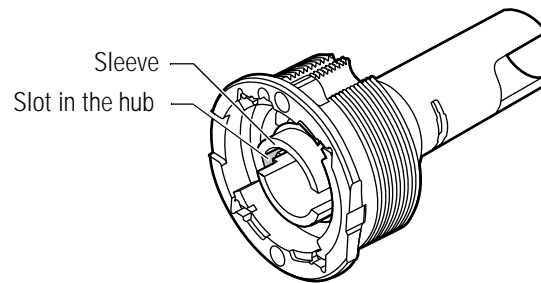
1. Remove the following components:
  - levers ([page 3-3](#))
  - roses and rose liners ([page 3-4](#) and [page 3-5](#))
  - button assembly, if present ([page 3-7](#))
  - lever return spring ([page 3-10](#))
  - key release cam assembly ([page 3-14](#)).
2. Pull the spring drive plate out of the hub, as shown in [Figure 3.26](#).



**Figure 3.26** Removing the spring drive plate

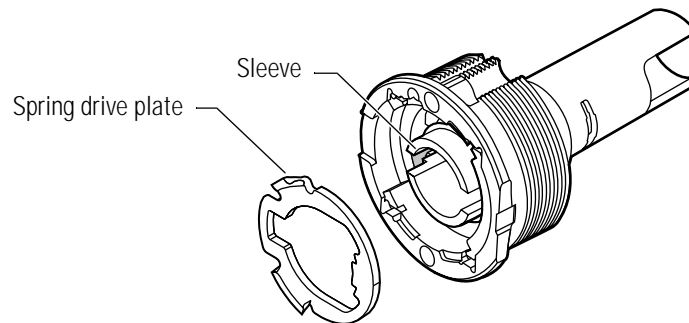
**To replace the spring drive plate:**

1. Align the sleeve so that the deep slot in the sleeve lines up with the slot in the hub, as shown in [Figure 3.27](#).



**Figure 3.27** Positioning the sleeve

2. Place the spring drive plate over the sleeve as shown in [Figure 3.27](#).



**Figure 3.28** Installing the spring drive plate

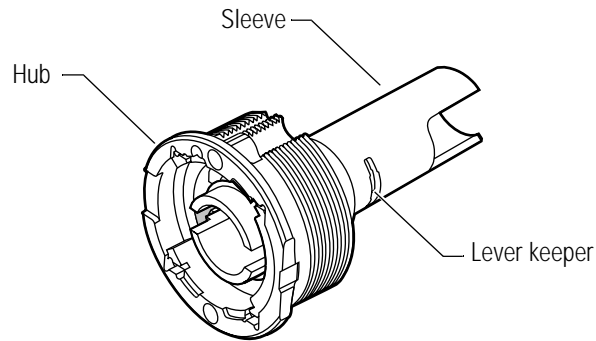
3. Replace the following components:
  - key release cam assembly ([page 3-15](#))
  - lever return spring ([page 3-12](#))
  - button assembly, if present ([page 3-8](#))
  - roses and rose liners ([page 3-5](#) and [page 3-6](#))
  - levers ([page 3-3](#)).

**Replacing the  
sleeve  
assembly**

**To remove the sleeve assembly:**

1. Remove the following components:
  - levers ([page 3-3](#))
  - rose and rose liner ([page 3-4](#) or [page 3-5](#))
  - button assembly, if present ([page 3-7](#))
  - lever return spring ([page 3-10](#))
  - key release cam assembly ([page 3-14](#))
  - spring drive plate ([page 3-15](#)).

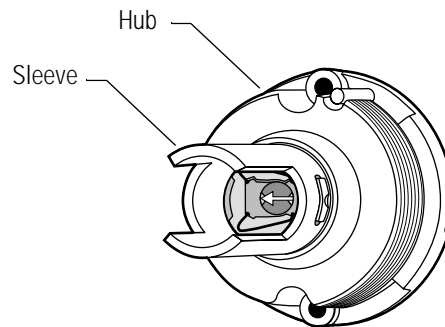
2. Press on the lever keeper, which protrudes through the cutout in the sleeve, as shown in [Figure 3.29](#). Pull the sleeve out of the hub, keeping the lever keeper pushed in until it clears the hub.



**Figure 3.29** Removing the sleeve assembly from the hub

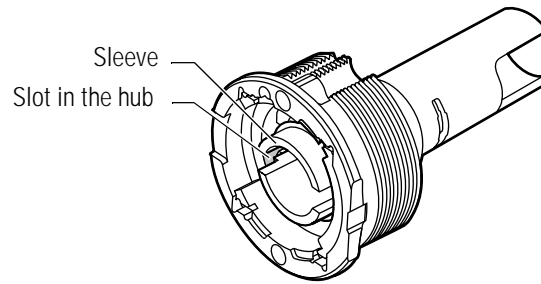
**To replace the sleeve assembly:**

1. Insert the sleeve through the hub as far as possible.
2. Insert a flat blade screwdriver through the sleeve and into the lever keeper.
3. Press the screwdriver blade in the direction of the arrow in [Figure 3.30](#). Push the sleeve the rest of the way through the hub.



**Figure 3.30** Replacing the sleeve assembly

4. Align the sleeve so that the deep slot in the sleeve lines up with the slot in the hub, as shown in [Figure 3.31](#).



**Figure 3.31** Positioning the sleeve

5. Replace the following components:
  - spring drive plate ([page 3-16](#))
  - key release cam assembly ([page 3-15](#))
  - lever return spring ([page 3-12](#))
  - button assembly, if present ([page 3-8](#))
  - rose and rose liner ([page 3-5](#) or [page 3-6](#))
  - levers ([page 3-3](#)).

## LUBRICATING THE CORES



*Do not lubricate cores with oil. Doing so will only attract dirt.*

### For powdered graphite lubrication:

1. Dip a key in graphite. Insert the key into the keyhole and remove it; repeat several times. *OR*  
Spray graphite into the keyhole. Insert the key into the keyhole and remove it; repeat several times.
2. Allow the graphite to sift into the pin segment holes.

### For silicone type lubrication:

1. Clean all existing lubricant out of the core.



*Do not mix graphite with a silicone-type lubricant.*

2. With the core inverted, spray the lubricant into the key opening allowing the spray to penetrate the pin segment holes.

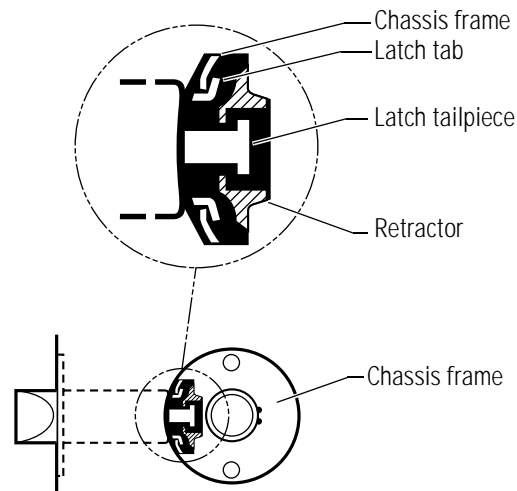
**Note:** When cores are installed and exposed to harsh weather conditions, silicone-type lubricants can help displace moisture as well as spread into pin segment holes and other surfaces.

## ALIGNING THE CHASSIS AND TRIM

Establish a schedule to inspect locks, doors, and door hardware for proper alignment and operation. Occasionally a lock chassis and/or rose trim may become loose and require tightening.

To retighten a loose or misaligned chassis or rose trim:

1. Remove the inside trim. See [page 3-4](#) for instructions.
2. Align the chassis with the latch. Make sure that the latch tabs engage the chassis frame and the latch tailpiece engages the retractor, as shown in [Figure 3.32](#).



**Figure 3.32** Engaging the retractor in the latch

3. Tighten the chassis screws.
4. Test the lever operation to make sure that the latch tailpiece does not bind with the chassis retractor.
5. Replace the inside trim. See [page 3-5](#) for instructions.

## CAM POSITIONING INSTRUCTIONS

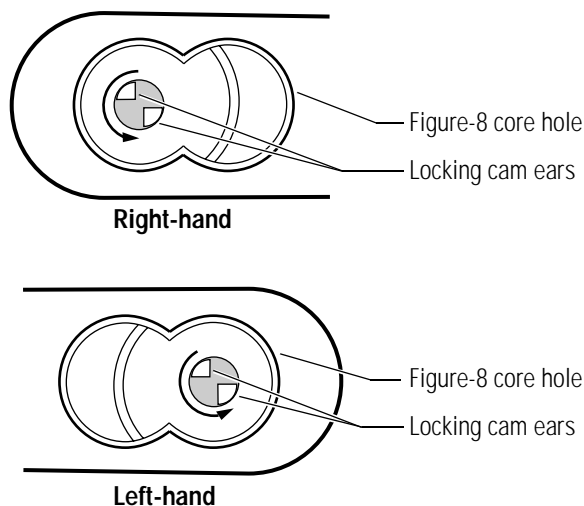
### Positioning the cam for C function locks

Vibration during the shipment of the C function locks may cause the inside locking cam to rotate out of position. You might notice this problem in one of the following ways.

- The inside key does not rotate the full 360° and the outside key does not rotate the full 135°. Remove the inside core and throw member, and perform the steps below to reposition the inside locking cam.
- Before you install the core and throw member, you can see that the inside locking cam is not positioned as shown in [Figure 3.33](#). Perform the following steps to reposition the inside locking cam.

To reposition the locking cam:

1. Looking into the figure 8 core hole in the inside lever, turn the locking cam ears counterclockwise to match the position shown in [Figure 3.33](#).



**Figure 3.33** Correct position of the C function inside locking cam

2. Install the core and throw member.
3. Check the operation of the levers while the door is open. The outside lever is locked by rotating the inside key 360° counterclockwise and unlocked by rotating the inside key 360° clockwise.



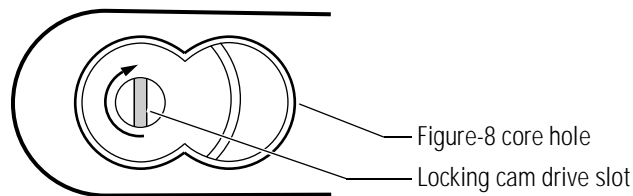
### Positioning the cam for G and IN function locks

Vibration during the shipment of the G and IN function locks may cause the inside locking cam to rotate out of position. You might notice this problem in one of the following ways.

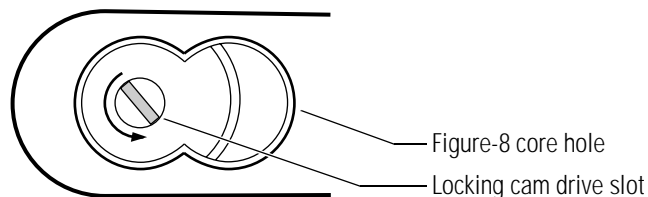
- With the levers in the locked position, both the inside and outside keys do not rotate one full turn in both directions. Remove both cores and throw members, and perform the following steps to reposition the locking cam.
- Before you install the core and throw member, you can see that the locking cam is not positioned as shown in [Figure 3.34](#). Perform the following steps to reposition the locking cam.

To reposition the locking cam:

1. Looking through the figure 8 core hole in either lever, turn the locking cam drive slot to match the position shown in [Figure 3.34](#).
2. Reinstall that lever's core and throw member.
3. Looking into the figure 8 core hole in the other lever, turn the locking cam drive slot counterclockwise until it stops, as shown in [Figure 3.35](#).
4. Turn the drive slot clockwise to match the position shown [Figure 3.34](#).



**Figure 3.34** Correct position of the G and IN function locking cam



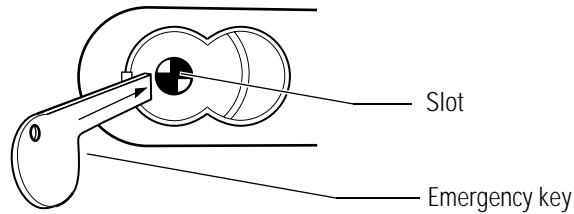
**Figure 3.35** Intermediate position of the G and IN function locking cam

5. Reinstall that lever's core and throw member.
6. Check the operation of the levers while the door is open. The levers are locked by rotating the key 1 1/4 turns counterclockwise and unlocked by rotating the key 1 1/4 turns clockwise.

## EMERGENCY KEY INSTRUCTIONS FOR H AND HJ FUNCTION LOCKS

To use the emergency key:

1. Remove the core and the throw member.
2. Insert the blade of the emergency key into the slot, as shown in [Figure 3.36](#).



**Figure 3.36** Inserting the emergency key

3. Turn the key and retract the latch.

## TROUBLESHOOTING

This table summarizes the possible causes for certain lock questions. The causes are listed in the order of likelihood. (The most likely cause is first, and so forth.)

You notice...	Possible causes include...	You should...
Lever won't return to its normal position.	a. Lever return spring is out of position. b. Lever return spring is broken. c. There is binding between the lever and rose.	a. Reposition the lever return spring (pg. 3-10). Replace the spring drive plate, if damaged (pg. 3-15). b. Replace the lever return spring (pg. 3-10). c. Ensure that the lock chassis is centered within the door (pg. 3-19).
Key spins freely, but won't retract the latch or unlock the door.	a. Throw member is not installed. b. 6-pin core is installed with a 7-pin throw member.	a. Install the throw member. b. Change the core or throw member.
Core doesn't fit into the lever core hole.	a. 7-pin core is installed with a 6-pin throw member. b. Keyed lever is defective.	a. Change the core or throw member. b. Replace the keyed lever (pg. 3-3).
Button doesn't pop out as expected.	Button shaft is damaged or bent.	Replace the button assembly (pg. 3-7).
Latch doesn't retract.	a. Latch tailpiece is broken. b. Latch tailpiece didn't engage the retractor correctly during installation.	a. Replace the latch assembly. b. Reinstall the lock chassis (pg. 3-5).
For a C function lock, the inside key does not rotate the full 360°, and the outside key does not rotate the full 135°.	Inside locking cam is out of position.	Reposition the inside locking cam (pg. 3-20).
For a G or IN function lock with levers in the locked position, the key does not rotate one full turn in both directions.	Locking cam is out of position.	Reposition the locking cam (pg. 3-20).
Cannot remove the operating key from an H or HJ function lock.	Key is turned 180° past the correct position.	Push the inside button, turn the key back clockwise 180°, and remove the key.



# A

---

## INSTALLATION INSTRUCTIONS

The following pages contain the *Installation Instructions for 9K Cylindrical Locks*, the *Installation Instructions for 9K 1DT & 2DT Dummy Trim Assemblies*, and the *Installation Instructions for 9K Non-interchangeable Cores & Throw Members*.



## For factory prepared doors only

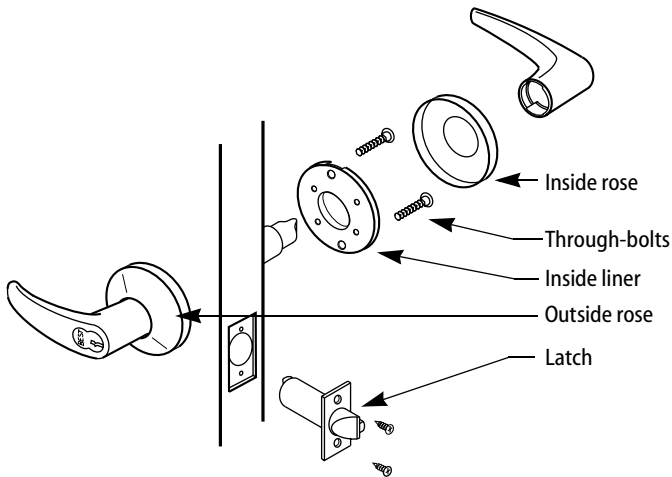


Figure 1

**Caution:** If you use hollow metal doors, decide whether the doors are reinforced enough to support the lock. If door reinforcement is not adequate, consult the door manufacturer for information on proper reinforcement.

### Simplified instructions

- 1 Install the latch so that the bevel on the latchbolt faces the strike.
- 2 Adjust the outside rose assembly so that the chassis is centered in the door. Install the chassis from the outside of the door.
- 3 Install the inside liner, through-bolts, rose, lever and strike.

For field door preparation and detailed installation instructions, see the following tasks.

## 1 Position template

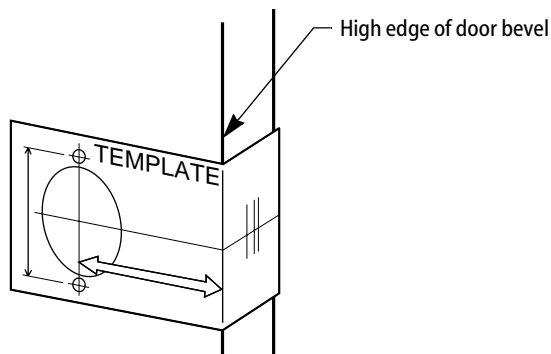


Figure 2

- 1 Fold the template and place in position on the high edge of the door bevel (see Figure 2).
- 2 Mark the drill points.

**Note:** Suggested height from floor to centerline of the lock is 40 5/16". If steel frames are used, the latch centerline must be in line with the center of the strike preparation.

## 2 Bore two holes and install latch

- 1 Bore a 2 1/8" diameter hole from both sides of the door, to the center of the door.
- 2 Drill a 1" diameter hole from the edge of the door that intersects the 2 1/8" hole.
- 3 Mortise the door edge for the latch face.
- 4 Install the latch and check the door swing. Latch tabs should project into the 2 1/8" diameter hole. See figure 3 in step 3.

## 3 Install boring jig and drill two 5/16" diameter holes

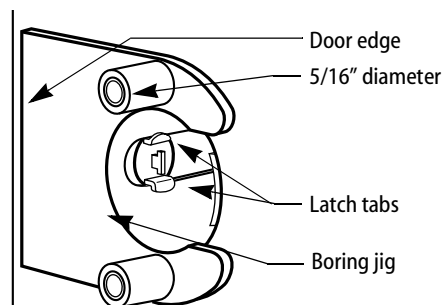


Figure 3

- 1 Install the boring jig (KD303) onto the door and engage with latch tabs. Make sure the front edge of the jig is parallel with the door edge (see Figure 3).
- 2 Drill two 5/16" diameter holes halfway into the door.
- 3 Turn the boring jig over and repeat steps one and two from the opposite side of the door.

**Note:** Replace the boring jig after ten door preparations.

## 4 Adjust lockset to door thickness

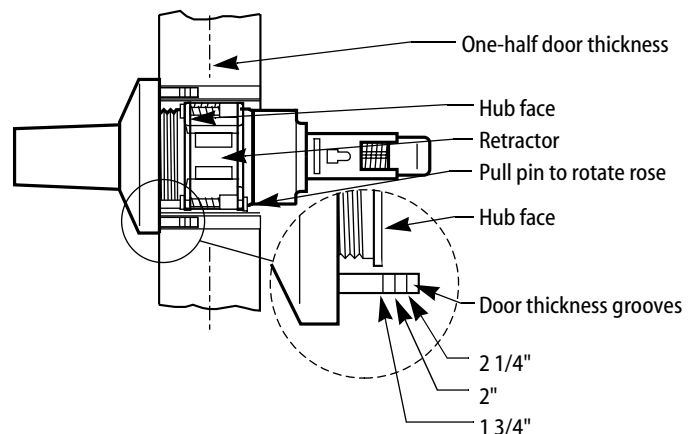


Figure 4

- Retract the rose locking pin and rotate the outside rose liner in or out

until the proper door thickness groove on the through bolt stud, lines up with the hub face (see Figure 4—blow-up).

**Note 1:** Make sure the locking pin locks into the rose liner.

**Note 2:** Locksets will fit doors 1 3/4" to 2 1/4" thick. (A spacer is available for 1 3/8" doors.) See the enlarged view for the correct rose adjustment for these thicknesses.

## 5 Engage retractor in latch

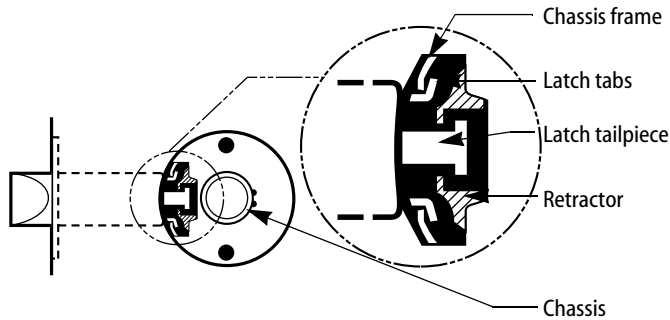


Figure 5

- With the latch in place, install the chassis from the outside. Make sure the latch tabs engage the chassis frame and the latch tailpiece engages the retractor (see Figure 5).

## 6 Install liner, through-bolts, rose and lever

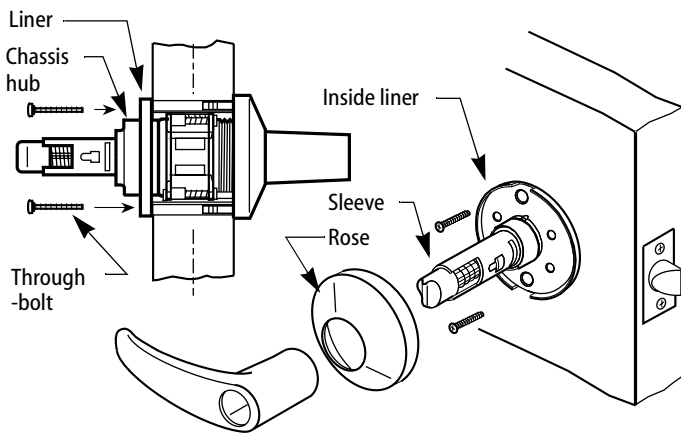


Figure 6

**Note:** For lead-lined locksets, slide the lead shield (not shown) over the sleeve and into the 2 1/8" hole.

- 1 Align the holes in the liner with the holes prepared in the door.
- 2 Install through-bolts through the liner and door in the top and bottom holes (see Figure 6).
- 3 Tighten the liner onto the door with the through-bolts.
- 4 Slide the rose over the sleeve, then press the rose onto the liner. The rose should fit closely to the door surface.
- 5 With the lever pointing toward the hinges, push the lever on firmly until seated.

## 7 Install strike plate

- 1 In alignment with the center of the latchbolt, mortise the door jamb to fit the strike box and strike plate.

**Caution:** The deadlocking plunger of the latchbolt must not enter the strike plate opening. The plunger deadlocks the latchbolt and prevents forcing the latch when the door is closed. A gap of more than 1/8" may reduce security and/or cause improper operation of the latchbolt.

- 2 Insert the strike box and secure the strike with screws provided (see Figure 7).

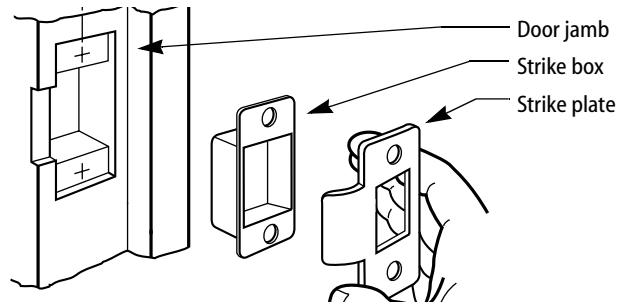


Figure 7

## 8 Install core

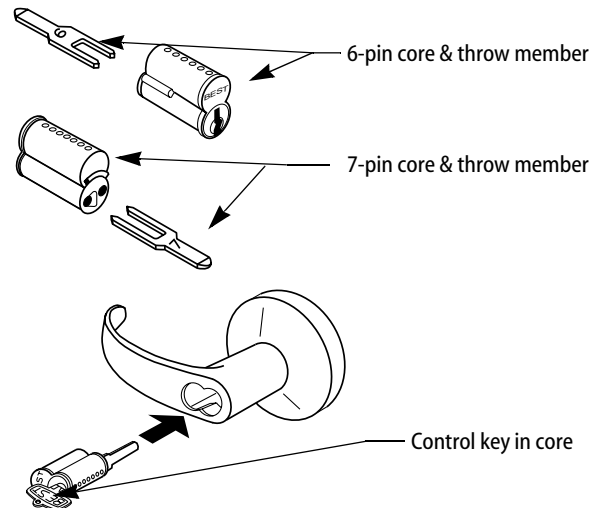


Figure 8

- 1 Insert the proper throw member into the core (see Figure 8—top). Six pin cores require the number "6" throw member; seven pin cores require the number "7" throw member.
- 2 Put the control key into the core and turn the key 15 degrees clockwise.
- 3 Put the core and throw member into the lever with the control key (see Figure 8—bottom).
- 4 Turn the key 15 degrees counterclockwise and remove the key.

**Caution:** Since the control key is a high-security key, make sure to keep it protected.





## Installation Instructions for 9K 1DT & 2DT Dummy Trim Assemblies

### 1 Mark and drill holes

- 1 Draw a height line across the face of the door. The suggested height is 40-5/16" from the finished floor.

**Note:** For pairs of doors, install the dummy trim at the same height line and backset distance from the edge of the door to the center of the lock trim on both the active and inactive sides of doors.

- 2 Place the template on the door. Mark and drill the two holes.

### 2 Install the dummy trim

#### For single dummy trim

- 1 Fasten the sleeve on to the door with the screws provided.
- 2 Slip the o-ring over the sleeve.

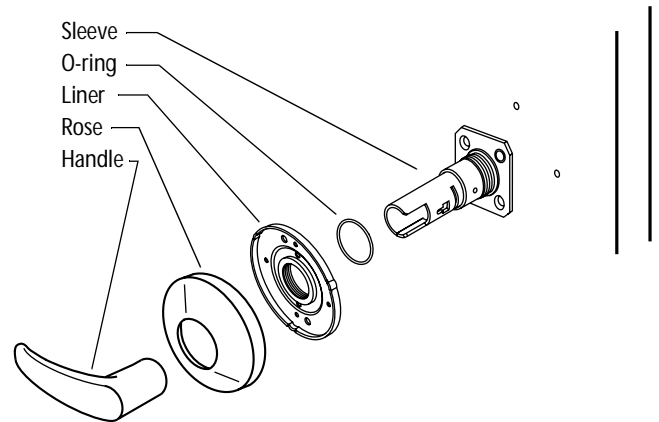


Figure 9 — Single dummy trim installation

- 3 Thread on the liner until it seats against the door.
- 4 Press the rose over the liner assembly.
- 5 Press on the handle.

— Continued



## Installation Instructions for 9K 1DT & 2DT Dummy Trim Assemblies

### 1 Mark and drill holes

- 1 Draw a height line across the face of the door. The suggested height is 40-5/16" from the finished floor.

**Note:** For pairs of doors, install the dummy trim at the same height line and backset distance from the edge of the door to the center of the lock trim on both the active and inactive sides of doors.

- 2 Place the template on the door. Mark and drill the two holes.

### 2 Install the dummy trim

#### For single dummy trim

- 1 Fasten the sleeve on to the door with the screws provided.
- 2 Slip the o-ring over the sleeve.

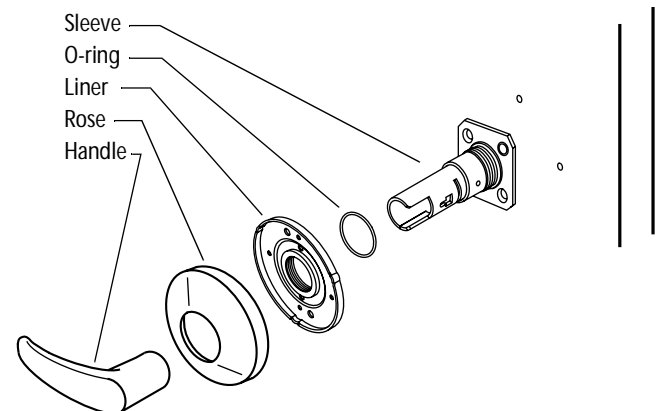


Figure 1 — Single dummy trim installation

- 3 Thread on the liner until it seats against the door.
- 4 Press the rose over the liner assembly.
- 5 Press on the handle.

— Continued

### For double dummy trim

- 1 Install the outside sleeve with studs from the side of the door opposite of the original template marks.

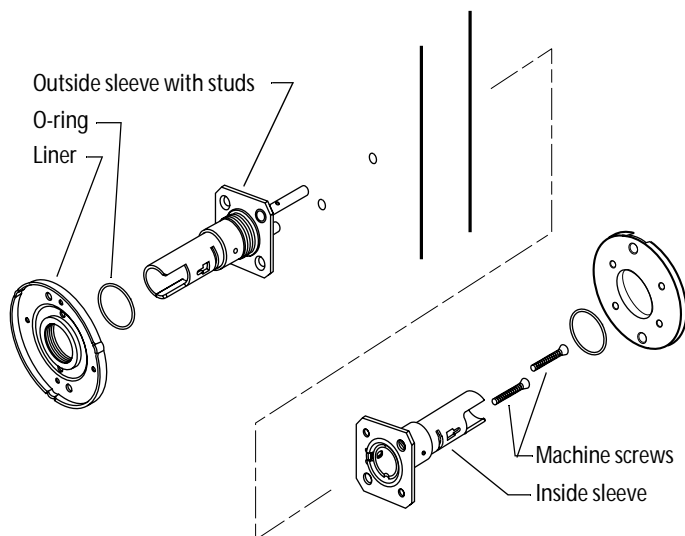


Figure 10 — Double dummy trim installation

- 2 Align the inside sleeve and secure using the machine screws provided.

- 3 Slip the o-rings over both sleeves.
- 4 Thread on both liners until they are seated against the door.
- 5 Press on the roses over the liner assemblies. See Figure 9.
- 6 Press on both handles.

### BEST ACCESS SYSTEMS

Indianapolis, Indiana

### For double dummy trim

- 1 Install the outside sleeve with studs from the side of the door opposite of the original template marks.

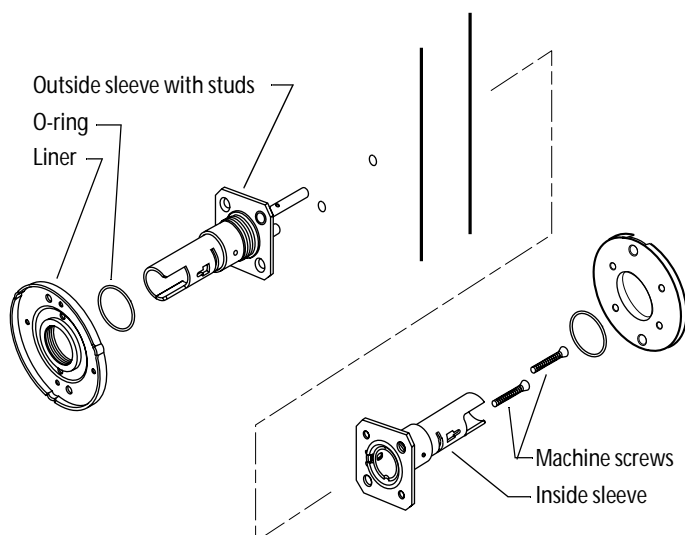


Figure 2 — Double dummy trim installation

- 2 Align the inside sleeve and secure using the machine screws provided.

- 3 Slip the o-rings over both sleeves.
- 4 Thread on both liners until they are seated against the door.
- 5 Press on the roses over the liner assemblies. See Figure 9.
- 6 Press on both handles.

### BEST ACCESS SYSTEMS

Indianapolis, Indiana

These instructions describe how to install a non-interchangeable core and a BEST throw member adaptation into a 9K BEST lever handle. Use these instructions only after completing the installation of the cylindrical chassis. For standard 9K cylindrical lock installation instructions see T56075 — *Installation Instructions for 9K Cylindrical Locks*.

The BEST 9K non-interchangeable cylindrical lock accepts the following keying system adaptations:

- Schlage
- Schlage Primus
- Corbin
- Sargent
- Yale
- Medeco

Follow these steps to install the core and throw member in an installed 9K lock:

## 1 Install throw member and core

### For Schlage, Schlage Primus, or Corbin keying systems

Follow these steps to install a Schlage, Schlage Primus, or Corbin core into the BEST 9K lever handle:

- 1 Install the BEST adaptation throw member.

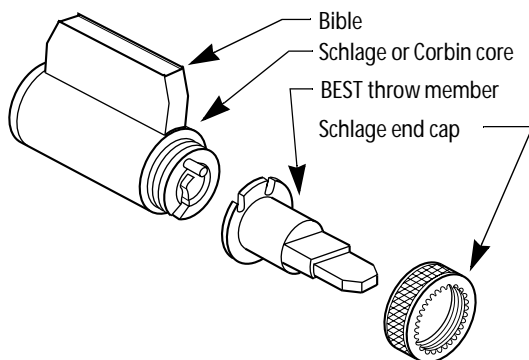


Figure 11

- 2 Install the throw member and core into the handle.

### For Sargent or Yale keying systems

Follow these steps to install a Sargent or Yale core into the BEST 9K lever handle:

- 1 Install the BEST adaptation throw member.

**Note:** For Yale cores install the throw member so that the countersunk hole is nearest the pin

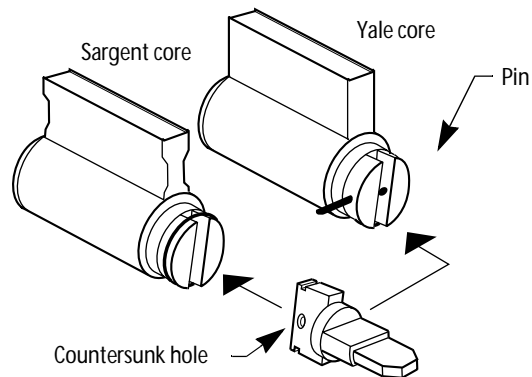


Figure 12

- 2 Install the throw member and core into the handle.

### For Medeco keying systems

Follow these steps to install a Medeco core into the BEST 9K lever handle:

- 1 Install the BEST adaptation throw member.

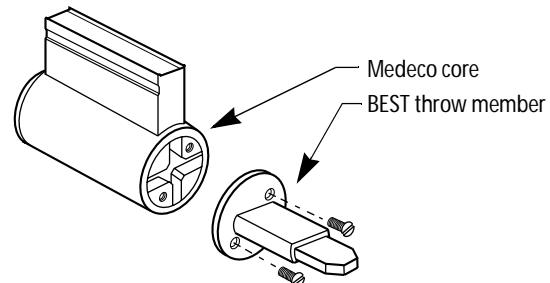


Figure 13

- 2 Install the throw member and core into the handle.

## 2 Install the lever insert and support ring

### For all keying systems

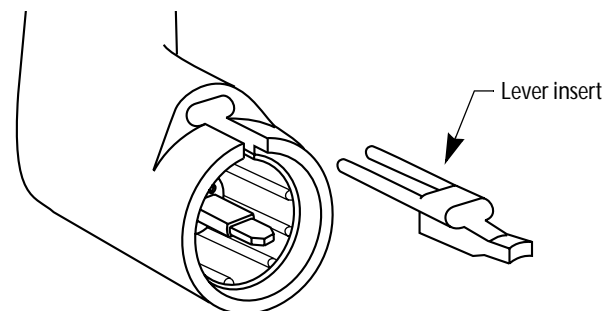


Figure 14

- 3 Install the lever insert.

4 Install the support ring.

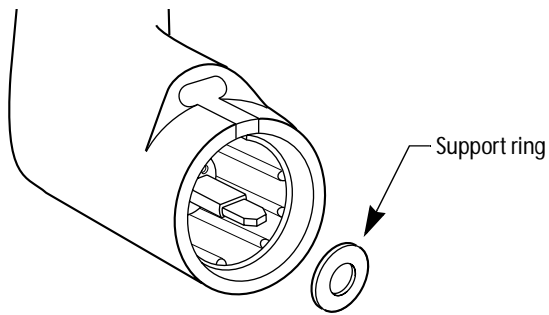


Figure 15

### 3 Install the lever handle

- 1 Insert the key into the core.
- 2 Turn the key 90 degrees counterclockwise.
- 3 Insert the lever handle until seated.
- 4 Remove the key from the core.
- 5 For double-keyed units, repeat steps 1–5.

### Patents

Products covered by one or more of the following patents:

#### U. S. Patents:

D290085, 4843852, 4262507, 4318558, 4428212, 4496178, 4428570,  
4437695, 4779908, 5116170

#### Canadian Patents:

1229358, 1184774, 1194057

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